audison

2014.1

# GENERAL CATALOGUE

istinto innovativo

bit Drive your sound

Full DA

# PHILOSOPHY

www.audison.eu

AWARDS

OVER 25 YEARS
OF PRODUCING
THE FINEST MOBILE
ELECTRONICS
IN THE WORLD

Sound reproduction has forever been a fascinating world where emotion and technology cohabit. Like any other form of art, the best result is achieved when these two values, at their peak, finally embrace.
With this combination in mind, every project we develop is born with this natural instinct.
Since the introduction of the HR 100, the application of advanced technology and emotion in every stage of a project has allowed us to create products which have marked the history of car hi-fi.
Unwaveringly dedicated to the research of perfection in sound reproduction, the recognition that world experts of the industry have shown towards the Audison brand makes us extremely proud of this choice.

*Thank you!*

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INNOVATIVO
bit Drive
your sound
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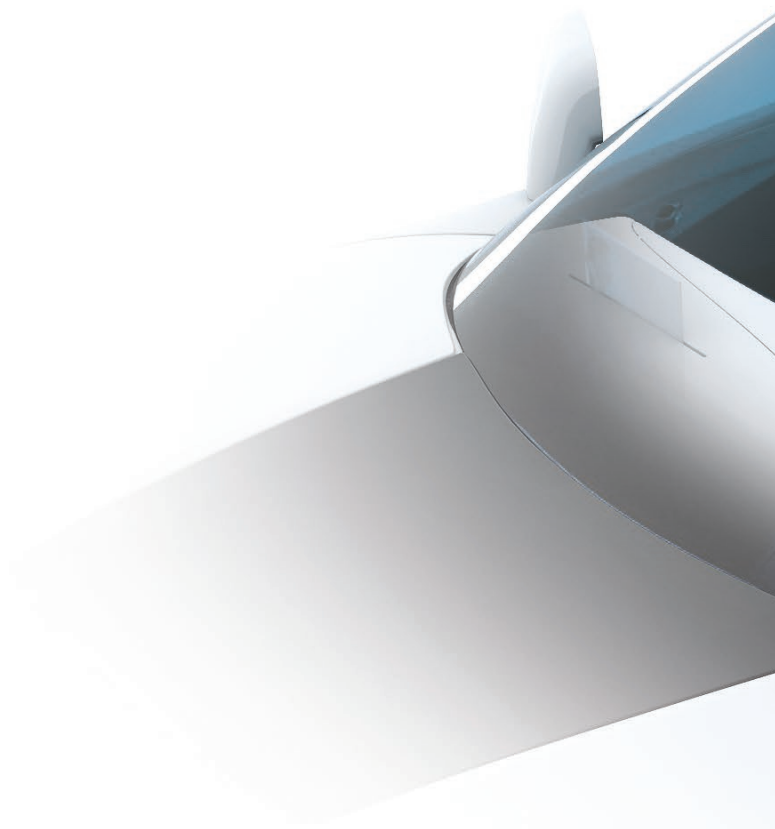
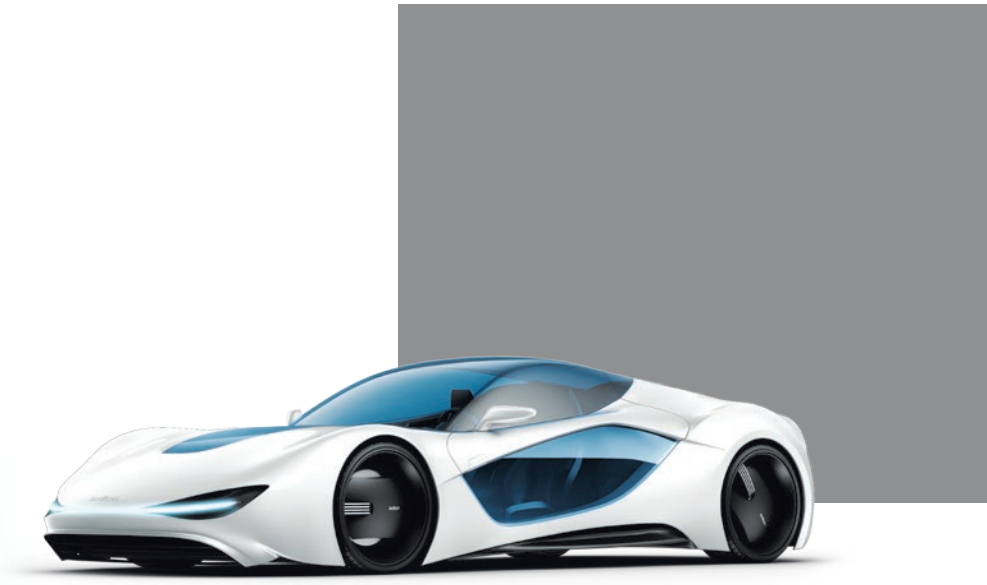
# BIT DRIVE



Audison is proud to announce a revolutionary digital audio technology for automobiles: bit Drive.
With the introduction of bit One, bit Ten and bit Ten D processors, Thesis, Voce and the new Prima amplifiers, Audison has been recognized by industry leaders, specialists and moreover by enthusiasts as the "reference" in the application of digital audio technologies to achieve unheard-of sound reproduction.
The Audison spirit never ceases to be innovative and continues with our latest creation: the bit Tune.
The Audison bit Tune is a revolutionary tool that allows you to automatically calibrate Audison bit processors, quickly providing maximum audio performance.
The bit Tune also includes an important set of tools useful in the everyday routine of the mobile electronics specialist, enabling you to enhance your creativity through instrumental experimentation.

**Audison is proud to introduce the bit Drive technology that is incorporated in all of its products featuring sound digital processing functions (DSP); with these products today, thanks to the bit Tune, you can implement the audio system you've always dreamt of: "Your Sound".**

bit Drive
your sound



**Emidio Vagnoni**, Technical Director
and Audison co-founder, observes:

*"Over the past 5 years our research team has focused its efforts in the field of digital audio.*
*Our deep experience, gained over many years in analogue topology, also highlighted the limitations of this technology to reproduce sound in the challenging environment such as found in the car. The study of digital technology is not limited to, as often happens, replicating traditional analogue technology more efficiently, but primarily focuses on the new possibilities it could offer to improve the sound reproduction and ergonomic integration of systems in vehicles.*
*Highly innovative product solutions were introduced, such as Audison bit processors for digital signal processing through DSP and AD Link and AC Link for the transmission and management of digital signals in each channel of amplification. This "wind of change" led to the emergence of the Audison bit Drive, immediately setting new sound reproduction standards in the mobile environment".*

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# THE NEXT AUDIO EXPERIENCE

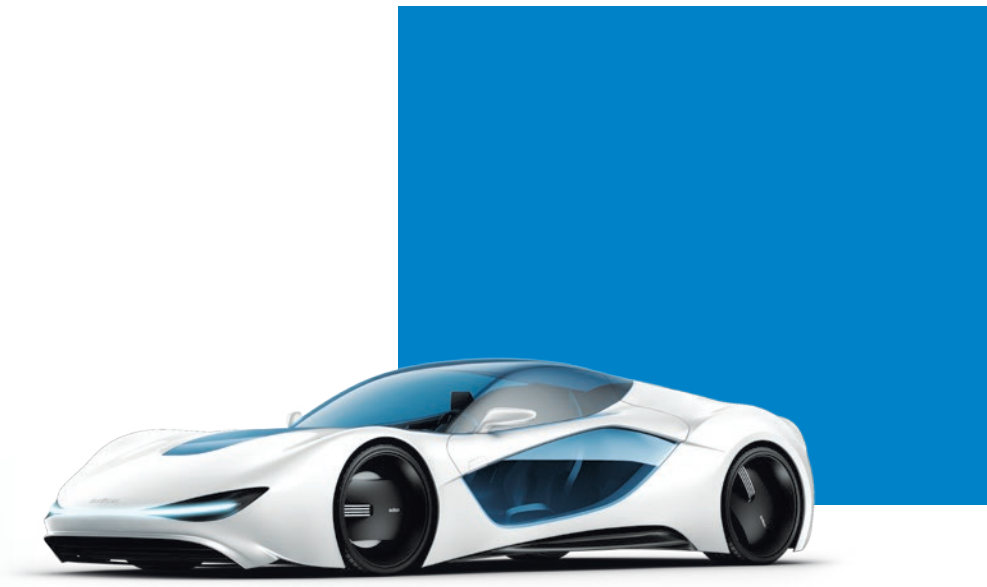
Audison is renowned for offering innovative solutions, ensuring the uniqueness of each new project. Today Audison asserts its passion and technology supremacy, unveiling a new frontier in audio reproduction.

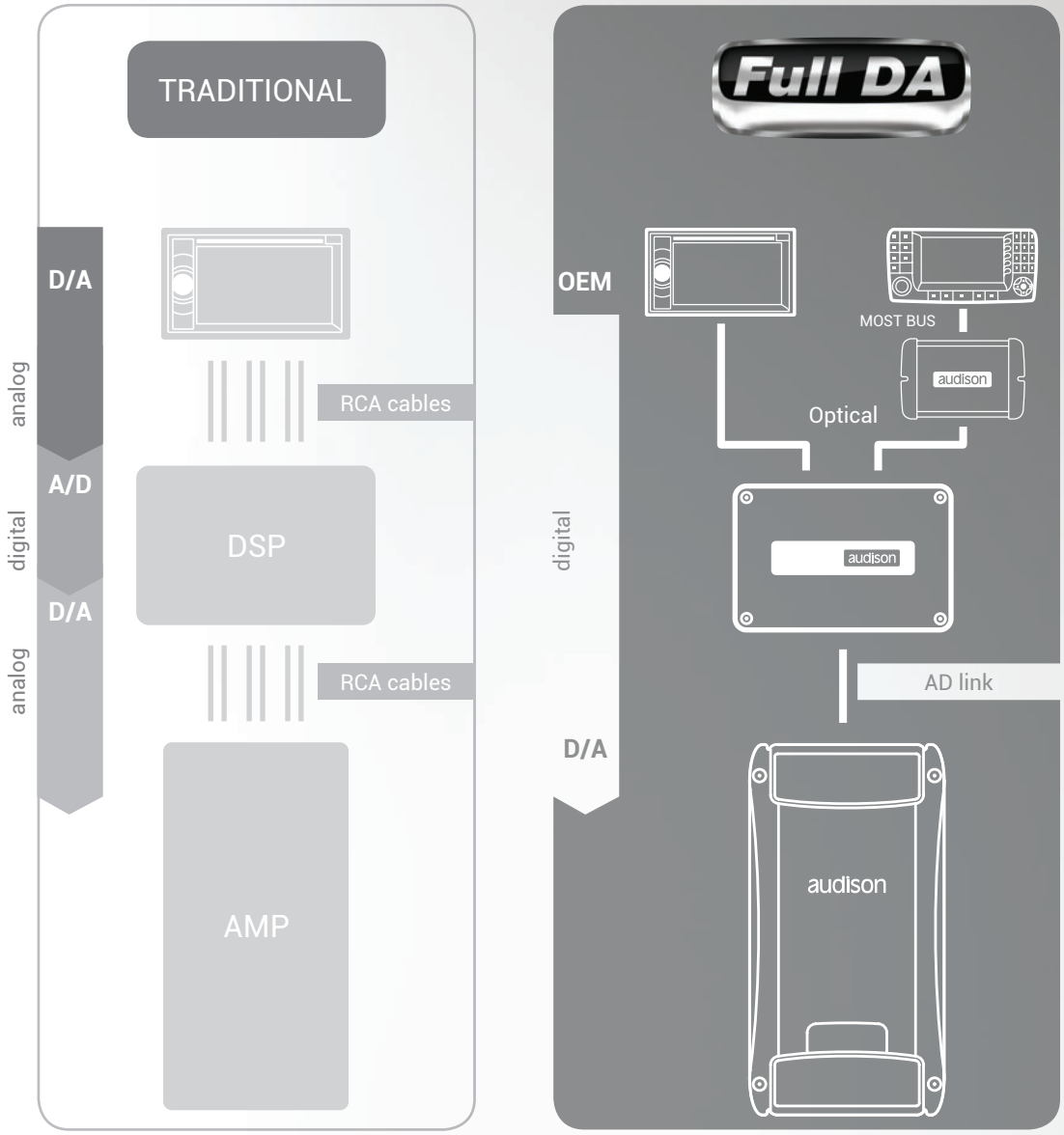
Audison introduces Full DA technology, opening the door to a new era of mobile audio reproduction. This breakthrough provides pure digital signal transfer from the source, through the processor into the amplifiers; the digital to analog conversion occurring just once, at the first stage of the amplifier. Thanks to Audison, it is now possible to enjoy an audio system free from the limitations and signal alterations of a traditional analog system.

Transmitting a digital audio signal filled with detail and emotion, Audison's Full DA technology goes beyond the standard CD resolution of 16bit/44.1kHz. We invite you to experience your music with 24bit/48kHz, 24bit/96kHz up to 24bit/192kHz resolution; the sound of the future!

A no compromise attitude towards acoustic reproduction; a traditional Audison philosophy.

Full DA






COMPARED WITH A TRADITIONAL SYSTEM, THE ADVANTAGES OF THE **FULL DA** ARE REMARKABLE:

**1)** A traditional system performs three conversions of the audio signal: the first at the head unit, often through low quality D/A converters, followed by further A/D and D/A conversion at the DSP. The Audison Full DA technology performs just one single conversion of the signal from digital into analog through high quality converters inside the amplifier.

**2)** Full DA provides the flexibility to listen to High Definition music such as DVD-A discs or other HD music files (HD Liquid Music). Full DA delivers stunning 24 bit resolution, thus surpassing the 16 bit sound quality barrier of the CD format used in traditional systems.

**3)** The Audison Full DA system requires minimal and simplified connections compared to that of a traditional system. An electric coaxial or optical TOSLINK digital cable runs from the source unit to the DSP. From there, a single AD Link LAN cable (CAT5S) capable of transmitting up to 8 channels of digital audio runs from the processor to the amplifiers. Radiated noise and signal degradation common in traditional signal cables are greatly reduced.

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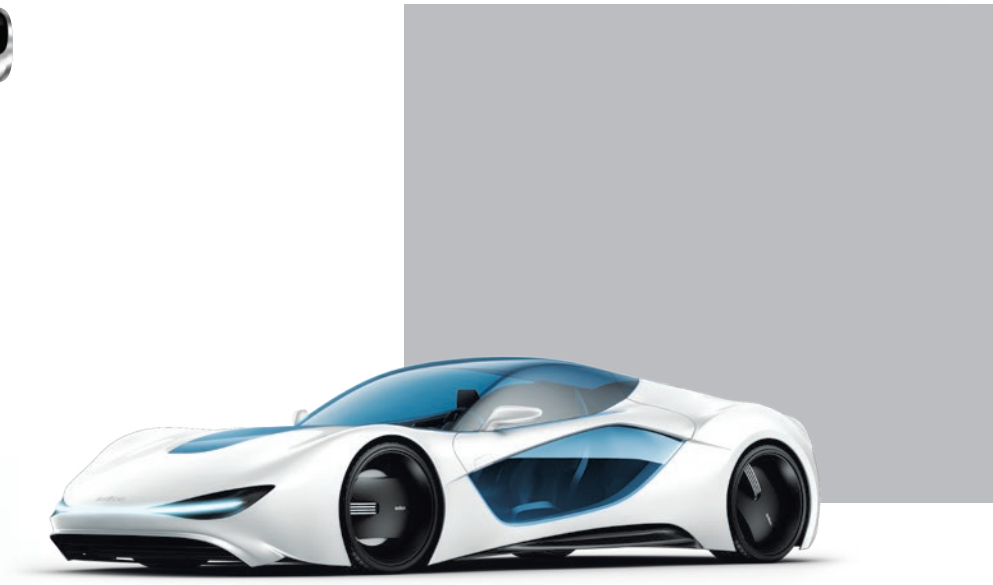
# CONNECT, CUSTOMIZE, CONTROL

How many times have we met the limits of OEM Integration, expandability or the overall sound quality of our audio system upgrades? Audison bit is the solution: multi-function digital processors capable of interfacing with any analog and/or digital source, turning ordinary audio system into one with very high-level performance.

A revolutionary technology making the acoustic domain of your car... truly yours.

bit Drive your sound

Full DA



bit one
Digital Audio Processor
audison
Full DA
bit Drive
USB
bit DMI
Digital Most Interface
audison
Full DA
OPTICAL OUT
MOST
POWER
PC
OFF ON
UPGRADE MODE
DRC
CH1
CH2
CH3
CH4
CH5
L FRONT R
L REAR R
SUB
OUTPUT
OPTICAL IN
bit Ten D
Signal Interface Processor
audison
AD Link
AC Link
Full DA
POWER
L – FRONT – R
L – REAR – R
PHONE
L – AUX – R
SPEAKER TURN ON
OFF ON
DE-EQ SET
AUX IN
L
R

bit

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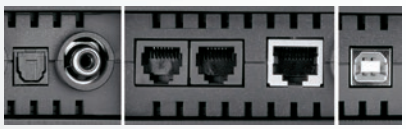
# AUDIO PROCESSOR

bit one

Full DA

bit Drive
your sound



**INPUT / OUTPUT**
The input/ output section is equipped with electric (coaxial) and optical digital inputs, along with high and low level analogue inputs, selectable through a direct, user- friendly procedure; for an endless array of possibilities.

**DSP**
A DSP (Digital Signal Processor) with unlimited calculation capability, processes the signal in the digital domain: the management and control of the acoustic reproduction are further improved by the accuracy, speed and configurability of the digital system. The bit One features a 32 bit floating point "Sharc" series DSP by Analog Devices, with a 266 MHz clock speed, and Wolfson Microelectronics A/D - D/A converters working in PCM at 48 kHz with 24 bit resolution.

# bit

Despite its compact size, the bit One is equipped with a fast, latest generation 266 MHz / 32 bit floating point DSP microprocessor, working in real time on all the functions of the most complete systems.
Managed and configured by a simple and intuitive computer software, it is possible to make adjustments to improve the signal through each phase of its path; from input to output. Eight input channels for four different signal typologies (amplified, pre-amplified, coaxial electric and TOSLINK optical digital) and six different sources managed through a remote control, making the bit One a unique interface suitable for any need.
Eight analog and/or digital output channels ensure vast expandability for any audio system configuration.

**DRC - DIGITAL REMOTE CONTROL**

**Listen to your favourite music without getting lost inside countless different controls. The DRC is the digital interface between the bit One processor and you. Volume control, Balance and Fader, source selector and memory settings are all at your fingertips; simplifying the intricacy of the available functions.**

**SOFTWARE**
The most effective, versatile and functional process to configure any system. The Windows®-based software features an interface that provides direct access to the endless adjustments and tuning opportunities that the bit One offers.

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bit Ten D and bit Ten are multi-function digital processor featuring analog and/or digital input combining simple and complex elements: a powerful DSP and a special software work with a set of manual controls.
They are provided with a 32 bit, 147 MHz clock speed DSP as well as 24 bit A/D and D/A converters; controlled by a software developed for signal treatment according to the vehicle acoustic peculiarities.

bit Ten D is conceived and built to process digital and analog signal both on input and on output to the amplifier (featuring AD Link connection) and create top-performance system with any source typology. bit Ten D features an optical digital input, minimizing interference and degradations of the signal found in traditional analog interconnects, also by-passing the A/D conversion phases of analog signals.

## bit Ten

Full DA

bit Drive your sound

## bit Ten D

**DRC - DIGITAL REMOTE CONTROL**
To remotely control the main system functions, sitting comfortably in your car without your PC, the bit Ten can be connected to the DRC through the AC Link output.

**bit Ten SOFTWARE**
For full control of system parameters, the bit Ten software is available for installation on PCs.

**SYSTEM CALIBRATION**
When you have in mind the system you want to realize, you can change any of the settings. In the first step, it's possible to calibrate the PRE-IN sensitivity levels with an extreme operational accuracy.

# DIGITAL MOST INTERFACE

**bit DMI** is a digital interface for MOST systems, providing the ability to connect the **Audison bit processors and the Audison amplifiers**, equipped with digital input, to OEM multimedia systems in cars featuring the MOST technology based on optical fibre. Thanks to the digital connection, **the signal can be transmitted without loss of quality**, keeping the audio controls built in the OEM head unit - such as volume, balance and tone controls- as well as the hands-free kit, navigation system and parking sensors alerts unaltered. In the bit DMI Product section of the Audison website you can find the "Vehicle Compatibility" utility: through it you can check compatibility of your OEM head unit with the bit DMI interface.

## bit DMI

Full DA

# AUDIO PROCESSOR

| | |
|---|---|
| **Audio Inputs** | Independent high-level inputs |
| | Analog low level main inputs |
| | Analog low-level stereo auxiliary input |
| | Optical digital input |
| | Electric coaxial digital input |
| | High-level momentary audio interrupt input with system turn on capability (with Phone Mute IN) for use with mobile phone or navigation systems |
| **Audio Outputs** | Independent analog PRE channels featuring adjustable level |
| | AD Link output (8 independent digital audio channels through a single CAT5 STP LAN cable for use with AD Link provided amplifiers) |
| **Input/Output Controls** | USB /B (2.0) connector for PC connection |
| | AC Link control bus connectors for DRC |
| | AC Link control bus for provided amplifiers |
| | Input for external Mute |
| | Remote In/Key mem |
| | Remote out with fixed delay or adjustable by PC |
| | Mute In for audio interrupt by external control |
| | Mute In and Phone Mute controls settable by PC to switch the audio inputs to auxyliary inputs with turn on capability |
| **System Configuration** | Full range stereo signal derived through automatic summing high level inputs channels |
| | Guided procedure that, thanks to a wide range of set names, provides the ability to assign each speakers channel to the bit processor connections and automatically coordinate their functioning |
| **In/Out Volume** | Main inputs sensitivity adjusted from a reference signal (with supplied Test CD or DVD for multimedia headunits) |
| | Main input sensitivity automatic or manual adjusted |
| | Input sensitivity adjustment for auxiliary analog inputs (by PC or manually) |
| | Independent level control for each output channel for system fine tuning (-40 ÷ 0 dB) |
| **Equalizer** | Dynamic equalizer: system self-adjusts between low and high listening levels |
| | Automatic de-equalization of signal fed into the high-level inputs (with supplied Test CD or DVD) |
| | Automatic de-equalization of signal fed without PC and equalized headunit check |
| | Separate 31-band graphic equalizers (1/3 oct; ±12 dB) for each auxiliary inputs |
| | Independent 31-band graphic equalizers (1/3 oct; ±12 dB) for each output channels |
| **Crossover Filter** | Filter typology: Selectable; Hi-pass, Lo-pass, Full Range, Bandpass |
| | Cut-off frequency: 70 or 68 steps available (from 10 or 20 Hz to 20kHz) |
| | Cut-off slope: Selectable (6 to 48 or 6 to 24 dB/Oct.) |
| | Bandpass filter with asimmetrical slope setting |
| | Alignments: Selectable; Linkwitz or Butterworth |
| | Mute: Selectable for each output (On/Off) |
| | Phase: Selectable for each output (0°/180°) |
| **Time Alignment** | Guided procedure for the speaker distance data entry with an automated calculation of proper delay times for each channel for accurate time alignment set-up. |
| | System also provides for manual fine tuning of delay (0÷22 or 0÷15 ms max) |
| **DRC** | Digital Remote Control (DRC) supplied with product |
| | Master Volume control, Subwoofer Volume control, Balance control, Fader control; Input selection; |
| | Memory presets selection |
| | Dynamic Equalizer On/Off |
| | Access to digital features of Audison TH amps if connected |
| **Memory** | Available presets separately managed and recalled by the DRC Remote Control |
| **Bit software** | Microsoft Windows (XP, Vista, 7 and 8) based software with “Standard” and “Expert” operating modes; minimum screen resolution: 1024 x 600 px |

| | bit One | bit Ten D | bit Ten |
|---|---|---|---|
| | 8 | 4 | 4 |
| | 6 | 4 | 4 |
| | 2 | 1 | 1 |
| | 1 | 1 | - |
| | 1 | - | - |
| | 1 | 1 | 1 |
| | 8 | 5 | 5 |
| | 1 | 1 | - |
| | √ | √ | √ |
| | √ | √ | √ |
| | √ | √ | x |
| | √ | √ | √ |
| | √ | √ | √ |
| | fixed | adj. | adj. |
| | - | √ | √ |
| | - | √ | √ |
| | √ | √ | √ |
| | √ | √ | √ |
| | CD-DVD | CD | CD |
| | automatic | manual | manual |
| | PC | √ | √ |
| | √ | √ | √ |
| | √ | - | - |
| | CD-DVD | CD | CD |
| | - | √ | √ |
| | √ | - | - |
| | √ | √ | √ |
| | √ | √ | √ |
| | 70 (10 Hz) | 68 (20 Hz) | 68 (20 Hz) |
| | 6 to 48 dB/Oct. | 6 to 24 dB/Oct. | 6 to 24 dB/Oct. |
| | - | √ | √ |
| | √ | √ | √ |
| | √ | √ | √ |
| | √ | √ | √ |
| | √ | √ | √ |
| | 0 ÷ 22 | 0 ÷ 15 | 0 ÷ 15 |
| | √ | √ | Optional |
| | √ | √ | √ |
| | √ | √ | √ |
| | √ | - | - |
| | √ | √ | - |
| | 4 | 2 | 2 |
| | √ | √ | √ |

# ACCESSORIES

**ES3**
It prevents the processor from shutting down when turning on cars featuring the start & stop system. When starting the engine, the vehicle battery voltage might decrease below 8 Volts value. If a signal processor (bit One, bit Ten) is installed in your car system, especially with cars featuring the start & stop system, low supply voltage values might make the processor shut down. In order to avoid waiting for the processor to complete its turn-on cycle again, you can install the ES3 by connecting it in series to the processor power supply cables.

**ECK DRC**
DRC Cable Extension kit for installations on especially long vehicles. Total length of the supplied cable with the extension is equal to 6,5 m / 225,90''.
**For all models**

**TOSLINK Optical Cable**
Optical digital audio signal cable, designed for car audio applications, permitting the transfer of the optical signal without signal loss. An especially thicker sheath protects the optical fibre to prevent the cable from damages if it is pressed against sharp edges.
The metal connector protects the optical fibre for its full length, ensuring a stable transmission of the signal also in the event of strong vibrations.
- OP 1.5 • TOSLINK
  Optical Cable 1,5m / 59,05''
- OP 4.5 • TOSLINK
  Optical Cable 4,5m / 177,16''
- STA • F/F Socket TOSLINK adapter

**For bit One, bit Ten D**

**RCA MULTIPOLE CONNECTOR**
RCA connector making link fast and link. It expedites connections between the head unit PRE OUTs (2 V min.) and the bit Ten Hi-Level inputs.
**For bit Ten D, bit Ten**

# HIGH DEFINITION IN-CAR MEDIA SERVER

## bit Play HD

Full DA

android

flac
free lossless audio codec

Made for iPod iPhone iPad

**APPLE/ANDROID APP**

Audison App to manage the media library and control the bit Play HD through Smartphones and Tablets. Available on the App store and Play store.

**REMOTE CONTROL**

ARC (Advance Remote Control).
Compact design controls all the player functions.
USR (User Remote Control).
Ultra-compact design to simplify management of audio playlists.

# bit

**bit Play HD and bit Play HD SSD** are **high resolution media server** specifically developed for car audio systems. By connecting the **bit Play HD optical output** to a processor or Audison amplifier with digital input, you create a **Full DA** system able to reach a new standard of quality that goes well beyond CDs inasmuch as being capable of playing encoded **FLAC audio files up to 24 bit/96 kHz**.
To help users who do not wish to have external hard-drives, the **bit Play HD SSD** features an **internal 240GB SSD 2.5" unit** which is **insensitive to the vibration** and shaking that occur while driving thanks to solid state technology and a specially designed damped mechanical housing. In addition, the SSD is much faster than a traditional hard disk and provides **maximum access speed to multimedia content**. If you have a video input, you can connect the bit Play HD and bit Play HD SSD to the head unit or to an external monitor via the **HDMI output** or composite video and view the **native interface of the media server** in order to directly control the multimedia file navigation functions via remote and access every setting of the device. Audison R&D department developed **an app for Apple and Android** devices that allows you to **connect your smartphone to your bit Play HD and bit Play HD SSD via Wi-Fi network** and use it as a remote control manager of the multimedia library without the need to connect the player to an external monitor.

| TECHNICAL SPECIFICATIONS | | | bit Play HD | bit Play HD SSD |
|---|---|---|---|---|
| GENERAL FEATURES | USER INTERFACE | **Dual mode:**<br>1) Advanced control on Video out via Remote control<br>2) Basic control via iOS/Android App | √ | √ |
| | SMARTPHONE CONTROL | **Dedicated Audison App for Android and iOS smartphone, to allow:**<br>1) Wi-Fi Streaming of smartphone multimedia contents to bit Play HD output (Android only). Alternatively standard DLNA Apps (iOS/Android).<br>2) Play the bit PlayHD storage multimedia contents.<br>3) File management of bit Play HD storage contents, with copy, delete and move functions | √ | √ |
| | MEDIA STORAGE | 1) 240GB SSD 2.5" (Internal, optional, up to 2TB support) | - | √ |
| | | 2) External USB HDD/Pendrive/DVD drive (up to 2TB support) | √ | √ |
| | FILE SYSTEM - MEDIA STORAGE | FAT32 & NTFS (Windows), EXT3 (GNU/Linux), HSF+ (Mac OSx) | √ | √ |
| | Wi-Fi | 802.11n - Internal Hotspot with external USB Wi-Fi Dongle (supplied) | √ | √ |
| MULTIMEDIA FORMAT | AUDIO FORMATS | Hi-Res Uncompressed: WAV, FLAC (Up to 96kHz/24bit) | √ | √ |
| | | Compressed: OGG, AAC, MPEG Audio (MP1, MP2, MP3, MPA) | √ | √ |
| | VIDEO FORMATS | WMV, DivX, Xvid, MPEG, H264 | √ | √ |
| | IMAGE FORMATS | JPG, BMP, PNG, GIF | √ | √ |
| SIGNAL CONNECTION | DIGITAL VIDEO OUTPUT | 1 x HDMI v1.3 | √ | √ |
| | ANALOG VIDEO OUPUT | 1 x Composite video (NTSC/PAL) | √ | √ |
| | TOSLINK OPTICAL OUTPUT | 1 x S/P-DIF - PCM 96 kHz/24 bit | √ | √ |
| | ANALOG PRE OUT | 2 x RCA, Left / Right | √ | √ |
| DATA CONNECTION | USB HARD DRIVE / PEN DRIVE | 2 x USB/A (1.1/2.0) - USB extension supplied | √ | √ |
| | LAN | 1 x 10/100M Ethernet / RJ45 port for future upgrade (Car NAS; 3G/LTE router; etc.) | √ | √ |
| | SATA | 1 x internal mini SATA 2.0 port for 2.5" SSD Drive<br>(Available version with SSD 240GB built-in)" | √ | √ |
| | FIRMWARE MEDIA UPGRADE | USB Pen Drive 1.1/2.0 (not supplied) | √ | √ |
| | FIRMWARE MANAGER UPGRADE | 1 x USB Type B (1.1/2.0) to PC | √ | √ |
| CONTROL CONNECTION | Audison AC Link | 1 x RJ12 - To Audison AC Link provided devices | √ | √ |
| | Audison DRC | 1 x RJ12 (optional) | √ | √ |
| INFRARED REMOTE CONTROLS (supplied) | URC | User Remote Control - Ultra-Compact 14 keys for audio control | √ | √ |
| | ARC | Advanced Remote Control - Compact 40 keys for audio/video control | √ | √ |

**INTERNAL MEMORY**
bit Play HD SSD features a **240GB SSD** 2.5" SATA 3.0 solid state drive, vibrationally damped.

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# BEYOND THE ABSOLUTE

In their purest essence, the synergy between technique and emotion constitutes the keystone of the Thesis project: aiming at one single purpose which, for the audio world, is the Sound.

**For pure reproduction, every element has been conceived and manufactured according to quality parameters, ensuring sheer excellence.**
Since the beginning, the Thesis product range has been conceived, designed and developed according to these principles. The Thesis project is characterized by a no compromise attitude: in the world of hi-fi car audio, the Thesis name is referenced as a product with the highest technological content, capable of arousing the emotions of even the most demanding audiophile.

Thesis products; you are immersed into a fully involving experience.

# THESIS

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# HV VENTI
# "THE AMPLIFIER"

THESIS
*HV venti*

# THESIS

**A stereo amplifier built according to absolutely Hi-End parameters.**

The amplifier stages feature; fully balanced input stage, Dual Mono construction, JFET differential stages, Mosfet-BJT hybrid configuration final stage, Servo DC and low feedback. All of these technologies ensure state-of-the-art performance. Dual Power function: Hi-Current and Hi-Power. Six power supplies providing current. A microprocessor monitors and stabilizes heat sink and driver circuit temperatures. A Status Display shows the amplifier operating conditions. Innovative mechanical engineering was employed to optimize thermal dissipation.

These are only some of the unique features which characterize “the Amplifier”.
The HV venti combines a Hi-Tech work of art with maximum listening pleasure, its owners proudly enthralled with choosing such a unique device.

| TECHNICAL SPECIFICATIONS | | | Hi-Current | Hi-Power |
|---|---|---|---|---|
| **Channel mode** | | | 2 - 1 | |
| **Output Power (RMS) @13.8 VDC** | @ 4 Ω | W x Ch | 200 x 2 | 400 x 2 |
| | | W x Ch | 800 x 1 | 1600 x 1 |
| | @ 2 Ω | W x Ch | 400 x 2 | 800 x 2 |
| | | W x Ch | 1300 x 1 | - |
| | @ 1 Ω | W x Ch | 650 x 2 | - |
| **Filters** | Bypass | | Amp / Out (Pre) | |
| | Hi-pass | Hz @ dB/Oct | 45 - 55 - 65 - 80 @ 12 dB/Oct | |
| | Lo-pass | Hz @ dB/Oct | 45 - 55 - 65 - 80 @ 12 dB/Oct (Stereo) / 24 dB/Oct (Mono) | |
| **THD** | 1 kHz @ 4 Ω | % | < 0.05 | |
| **S/N Ratio** | A weighted @ 1 V | dB | 100 | |
| **Damping factor** | 1 kHz @ 4 Ω | | 80 | |
| **Size** | W x D x H | mm | 280 x 510 x 85 | |
| | | inch | 11.02 x 20.08 x 3.35 | |

# THE HIGHEST EXPRESSION OF SOUND

Full DA

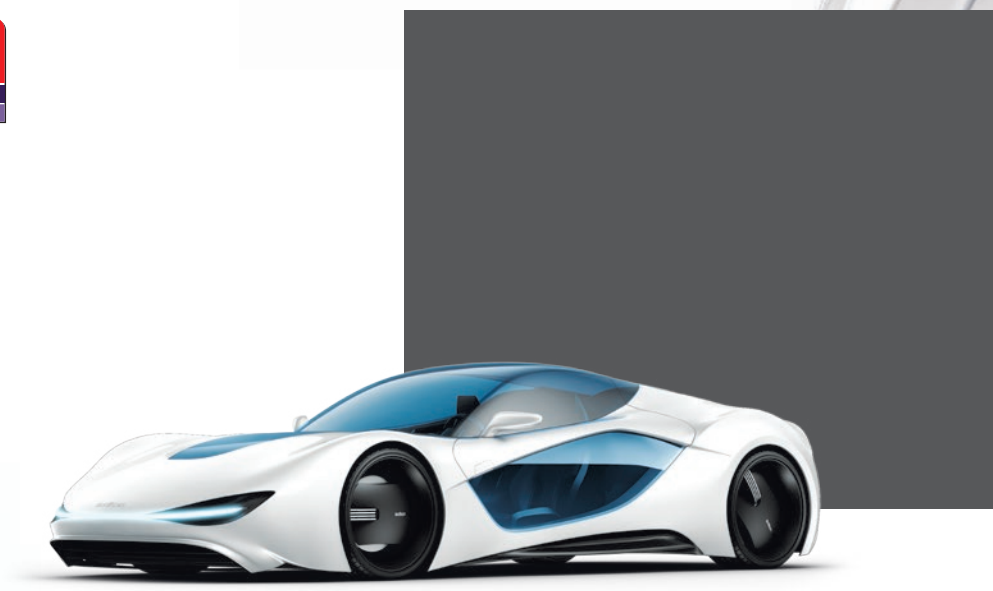
The roads travelled to reach "the Sound" have created a conceptual cross-road, where, until now, **state-of-the-art digital technology and traditional techniques** have gone their separate ways. They both have benefits of a different nature, yet are capable of merging together to achieve much higher Sound quality levels.

The Thesis amplifiers are born with the know-how and the experience achieved with the HV venti, improved by the innovation of digital technology. The result is a perfect combination between the highest level of analog technology and the advanced functions of the digital technology in one unique product.

Auto Sound Grand Prix 2008 Winner

Innovations International 2009

EISA Award Best Product 2008-2009 IN-CAR AMPLIFIER Audison Thesis TH due



# THESIS

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# TECHNOLOGY

### ACNET
The Audison Control Network is a software used to configure the system through a computer connected to the amplifier via USB. ACNet monitors and sets all the amplifier's functions.

### STATUS DISPLAY
The ASC (Amplifier Status Controller) is a visual element, providing local control, monitoring of the amplifier's status, as well as memory storage functions.

### DIGITAL INPUTS AND OUPUTS
Innovation is at the heart of the state-of-the-art digital decoding section. The S/PDIF optical input allows direct connection to digital sources with the ability to re-launch the digital signal to other Thesis amplifiers through the AD Link (Audison Digital Link) system. Each amplifier features 192 kHz/24 bit PCM D/A conversion through a very high quality converter.

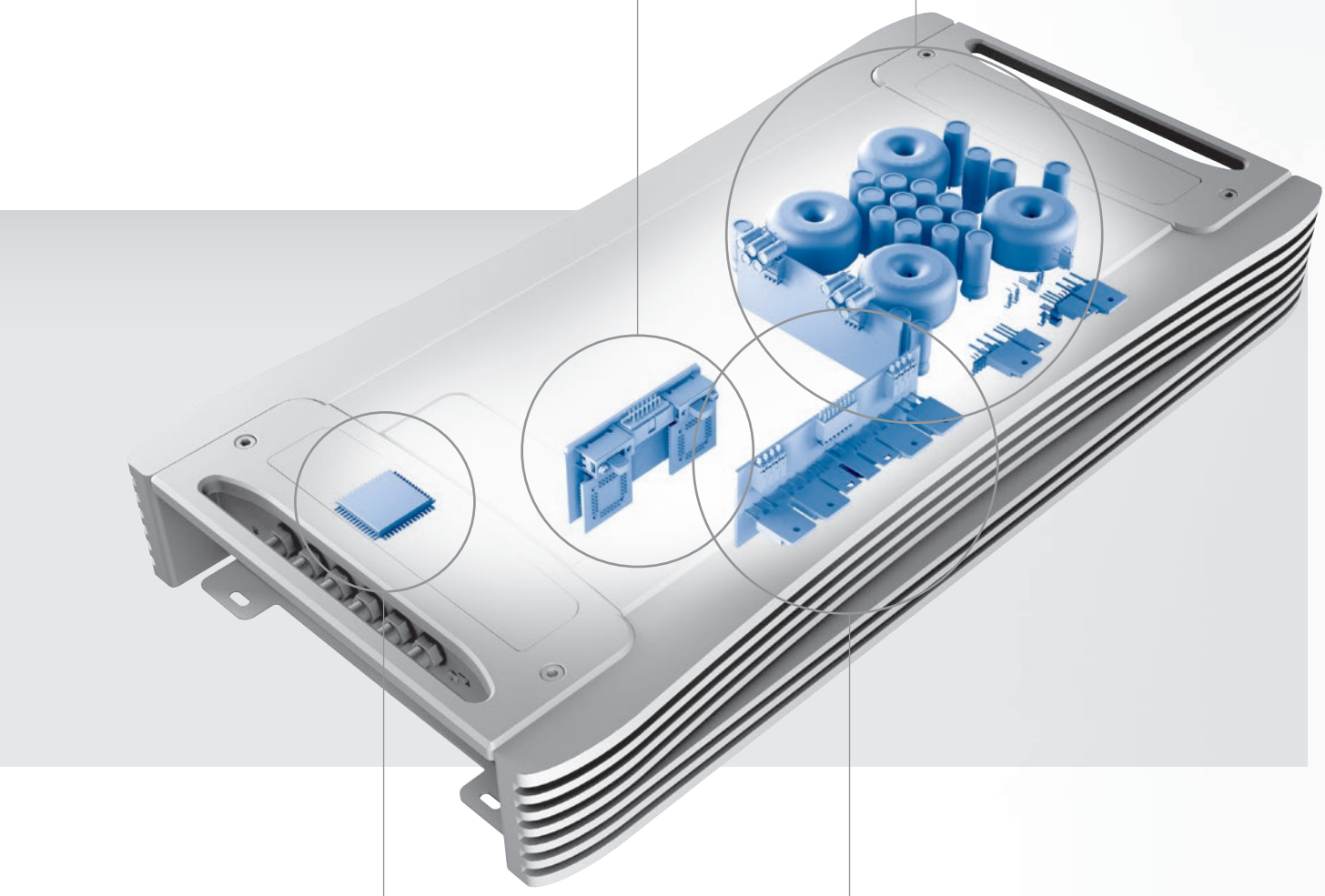
### DRC - DIGITAL REMOTE CONTROL
The DRC mounted in the vehicle dashboard, provides access to the functions of all the Thesis amplifiers installed in the system, all within your immediate grasp.
Providing source selection between analog and optical inputs, it also controls the essential functions you need to access frequently.

Inherited from the HV venti and making the most of TH's extreme versatility, the complete crossover circuit of the TH amplifier is removable; a high-end sound quality solution.

**REMOVABLE CROSSOVER**

A revolutionary function that provides configuration of the amplifiers output power and the grade of the operational output class.

**DUAL POWER**



**AMPLIFIER STATUS CONTROLLER**

The ASC controls all the amplifier's functions, with each operation displayed on the LCD panel and/or DRC, ensuring constant monitoring of the amplifier.

**BIAS CONTROL**

Provides selection of four possible presets: Energy Saving, Hi-Current, Hi-AB Class and full A Class operation.

# AMPLIFIERS

**TH uno**

**TH due**

**TH quattro**

# THESIS

**TH uno:** a single channel (mono) amplifier used to achieve maximum performance under any load Specifically designed to drive systems and subwoofers with self-assured mastery.
**TH due** is a bridgeable, stereo amplifier. A logical choice and natural partner for systems where versatility, power and quality are the main parameters. The ultimate amplifier.
**TH quattro** is a four-channel amplifier fully configurable and entirely manageable by the internal microprocessor, for no limit system configuration.

| TECHNICAL SPECIFICATIONS | | | TH uno | TH due | TH quattro |
|---|---|---|---|---|---|
| **Channel mode** | | | 1 | 2 - 1 | 4 - 3 - 2 (A/B) |
| **Output Power (RMS) @14.4 VDC Dual Power - Hi-Current** | @ 4 Ω | W x Ch | 850 x 1 | 300 x 2 | 160 x 4 |
| | | W x Ch | - | 1000 x 1 | 150 x 2 + 540 x 1 |
| | | W x Ch | - | - | 500 x 2 |
| | @ 2 Ω | W x Ch | 1500 x 1 | 500 x 2 | 260 x 4 |
| | | W x Ch | - | 1500 x 1 | 250 x 2 + 650 x 1 |
| | | W x Ch | - | - | 700 x 2 |
| | @ 1 Ω | W x Ch | 2300 x 1 | 750 x 2 | 340 x 4 |
| **Dual Power - A Class** | @ 4 Ω | W x Ch | 200 x 1 | 80 x 2 | 55 x 4 |
| **Amp Chain Mode** | @ 2 Ω | W x 2 Amp | 4500 x 1 | - | - |
| **Filters - Modules** | TH-MXR/Not mounted | | 1 / Bypass | | 2 / Bypass |
| **TH-MXR Specifications** | | | Hi-pass/Lo-pass/Band-pass @12/24 dB/Oct. (32 steps 18 ÷ 7.5k Hz) | | |
| **Inputs** | | | Analog, Digital, Optical, AD Link | | |
| **THD** | 1 kHz @ 4 Ω | % | 0.01 | 0.02 | 0.03 |
| **S/N Ratio** | A weighted @ 1 V | dBA | 106 | 106 | 104 |
| **Damping factor** | 1 kHz @ 4 Ω | | 500 | 100 | 80 |
| **Size** | W x D x H | mm | 259 x 510 x 67 | 259 x 510 x 67 | 259 x 510 x 67 |
| | | inch | 10.12 x 20.07 x 2.63 | 10.12 x 20.07 x 2.63 | 10.12 x 20.07 x 2.63 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Amplifier Power Standard CEA CEA-2006 Compliant | **RMS Output Power** | 4 Ω, ≤ 1% THD+N , 14.4 V | W x Ch | 700 x 1 | 300 x 2 | 150 x 4 |
| | **S/N Ratio** | Ref. 1 W Output | dBA | 75 | 80 | 80 |

# THE AUTHENTIC VOICE

Originating directly from the experience of the outstanding Thesis line, the Voce components take the in-car listening experience to a new level of excellence. Innovative and advanced design, reference performance; the synthesis of a solid know-how employed in car audio reproduction.

At the service of sound, a new Voice for music.

EISA AWARD Best Product 2010-2011
IN-CAR SPEAKER SYSTEM
Audison Voce AV K6

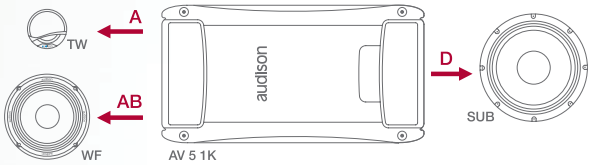
EISA AWARD Best Product 2011-2012
IN-CAR AMPLIFIER
Audison Voce AV 5.1k

EISA AWARD Best Product 2012-2013
IN-CAR SUBWOOFER
Audison Voce AV 10

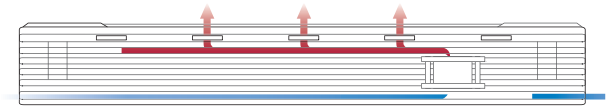
# voce

audison

# TECHNOLOGY




**A + AB + D CLASS TECHNOLOGY:**
Continuing with ground breaking Audison technology, the AV 5.1k uses three different typologies A, AB and D Class in one chassis: A Class for linearity and detail, AB Class for accuracy and high power, D Class for enhanced power efficiency.



**FORCED AIR FLOW**
Forced air flow improves cooling; taking cool air from the outside and directing it where it is most needed. The air is directed along the top of the amplifier chassis and hot air is vented out from side openings.

**AV BIT IN**
Digital interface for all AV amplifiers. It offers one AD Link and AC Link input as well as one AD Link and AC Link output for a perfect digital connection with digital processors (bit One and bit Ten D) to drive a multi-amplified system. Simply remove the standard analog module and replace with the AV bit IN module; the AV amplifier is now an integral element of a Full DA system.

**VCRA - REMOTE SUB VOLUME CONTROL**
When you drive the subwoofer in mono, for all AV models, you can use VCRA Analog Remote Volume Control by connecting the Esternal Subwoofer Volume to the special SUB VOL socket.

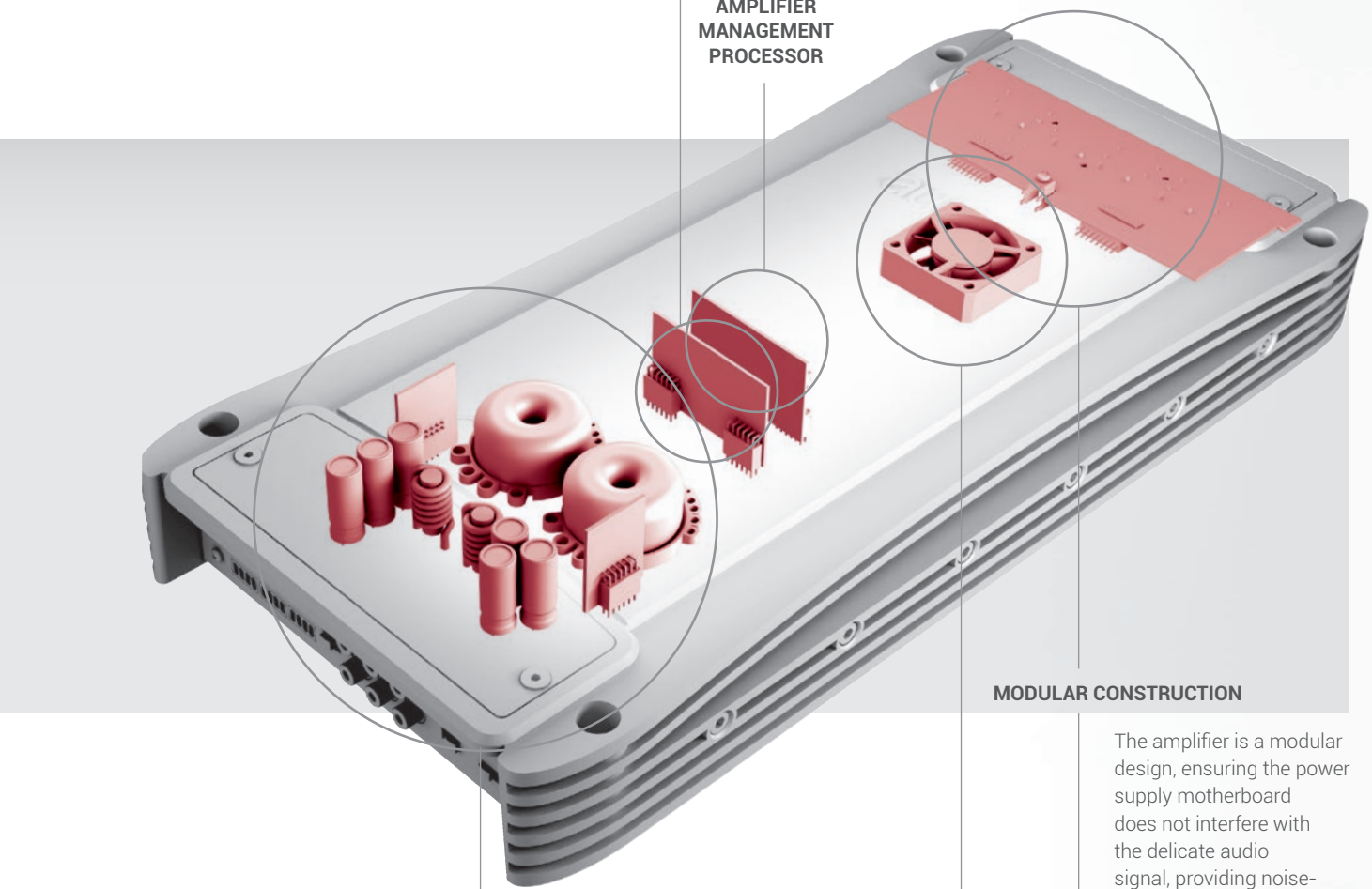
# voce

Regulated power supply with double PWM (Pulse With Modulation) control. The output power does not change with variations in power supply voltage; the amplifier performance remains unchanged even with the ignition off.

**POWER SUPPLY SECTION**

AMP is a microprocessor that constantly analyses voltage, current, output load and temperature activating protection circuits when required.

**AMPLIFIER MANAGEMENT PROCESSOR**



**MODULAR CONSTRUCTION**

The amplifier is a modular design, ensuring the power supply motherboard does not interfere with the delicate audio signal, providing noise-free amplification. The removable input/crossover section provides easy insertion of the AV bit IN digital module.

**DOUBLE TRANSFORMERS**

The power supply stage features dual multiple-winding transformers to increase the efficiency and power delivery in any difficult load condition.

**SMART AIR FLOW**

A fan is the heart of this circuit; its two speed system is thermostatically controlled by the AMP; the higher the heat dissipation requirement, the higher the fans speed will be. SAF ensures maximum thermal management, with quiet operation.

# AMPLIFIERS

**AV uno**

**AV due**

**AV quattro**

**AV 5.1k**

# voce

**AV uno** is a mono amplifier designed to drive the subwoofer but also suitable for high power Dual Mono systems. It allows to combine the plus points, in terms of audio quality and robustness, of the AB Class traditional amplifiers with the efficiency of the D Class modern amplifiers.

**AV due** is a powerful stereo amplifier. Designed to work also in mono and tri-mode, it ensures very high output current with powers up to 900 W (RMS).

**AV quattro** is a four channel amplifier which can work in four, three, two channel mode, delivering 800 W bursting power total. It is conceived in order to handle complex configurations as front/rear and multi-channel systems.

**AV 5.1k** is the Audison specialist amplifier for front + rear + subwoofer or multi-amplified front + subwoofer systems. A Class quality, AB Class energy and D Class power; together providing the most complete amplifier choice.

| TECHNICAL SPECIFICATIONS | | | AV uno | AV due | AV quattro | AV 5.1k |
|---|---|---|---|---|---|---|
| Channel mode | | | 1 | 2 - 1 | 4 - 3 - 2 (A/B) | 5 (A/B/C) |
| Output Power (RMS) @14.4 VDC | @ 4 Ω | W x Ch | 700 x 1 | 260 x 2 | 120 x 4 / 400 x 2 | 75x2/A + 140x2/B + 600x1/C |
| | @ 4 Ω | W x Ch (mono) | - | 900 x 1 | 120 x 2 + 400 x 1 | - |
| | @ 4/2 Ω | W x Ch | - | - | 120 x 2 + 200 x 2 | 75x2/A + 140x2/B + 1000x1/C |
| | @ 2/4 Ω | W x Ch | - | - | 200 x 2 + 400 x 1 | 75x2/A + 250x2/B + 600x1/C |
| | @ 2 Ω | W x Ch | 1300 x 1 | 450 x 2 | 200 x 4 | - |
| | @ 1 Ω | W x Ch | 1700 x 1 | - | - | - |
| Filters | All channel full range | | OK | OK | OK | OK |
| | Hi-pass | Hz @ dB/Oct | - | 50 ÷ 5k (2 range) @ 12 | A/B: 50 ÷ 5k (2 range) @ 12 | A: 50 ÷ 5k (2 range) @ 12 |
| | | | - | - | - | B: 50 ÷ 1k @ 12 |
| | Lo-pass | Hz @ dB/Oct | 50 ÷ 150 @ 24 | 50 ÷ 5k (2 range) @ 12 | A/B: 50 ÷ 5k (2 range) @ 12 | B: 250 ÷ 5k @ 12 |
| | | | - | 50 ÷ 500 (mono) @ 24 | B: 50 ÷ 500 (mono) @ 24 | C: 50 ÷ 150 @ 24 |
| | Subsonic | Hz @ dB/Oct | Off ÷ 50 @ 24 | - | - | - |
| | PRE Out | Hz @ dB/Oct | Hi-pass: 50 ÷ 150 @ 12 | Full range | Full range | Full range |
| | Remote Sub Vol.- VCRA | (-50 ÷ 6) dB | OK | Lo-pass mono | B ch Lo-pass mono | C ch |
| THD | 1 kHz/100 Hz @ 4 Ω | % | 0.04 /- | 0.04 /- | 0.04 /- | A/B: 0.05 / C: 0.3 |
| S/N Ratio | A weighted @ 1 V | dBA | 95 | 100 | 100 | A/B: 100 / C: 87 |
| Damping factor | 1 kHz/100 Hz @ 4 Ω | | 160 /- | 120 /- | 100 /- | A/B: 100 / C: 80 |
| VCRA - Remote Sub Volume Control (optional) | | | OK | OK | OK | OK |
| Size | W x D x H | mm | 220 x 470 x 58 | 220 x 470 x 58 | 220 x 470 x 58 | 220 x 470 x 58 |
| | | inch | 8,66 x 18,50 x 2,28 | 8,66 x 18,50 x 2,28 | 8,66 x 18,50 x 2,28 | 8,66 x 18,50 x 2,28 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Amplifier Power Standard CEA-2006 Compliant | RMS Output Power | 4 Ω, 1% THD, 14.4 VDC | W x Ch | 700 x 1 | 260 x 2 | 120 x 4 | 75 x 2 + 140 x 2 + 600 x 1 |
| | S/N Ratio | Ref. 1 W Output | dBA | 80 | 80 | 80 | A / 75 W Ch: 80<br>B / 140 W Ch: 80<br>C / 600 W Ch: 78 |

audison

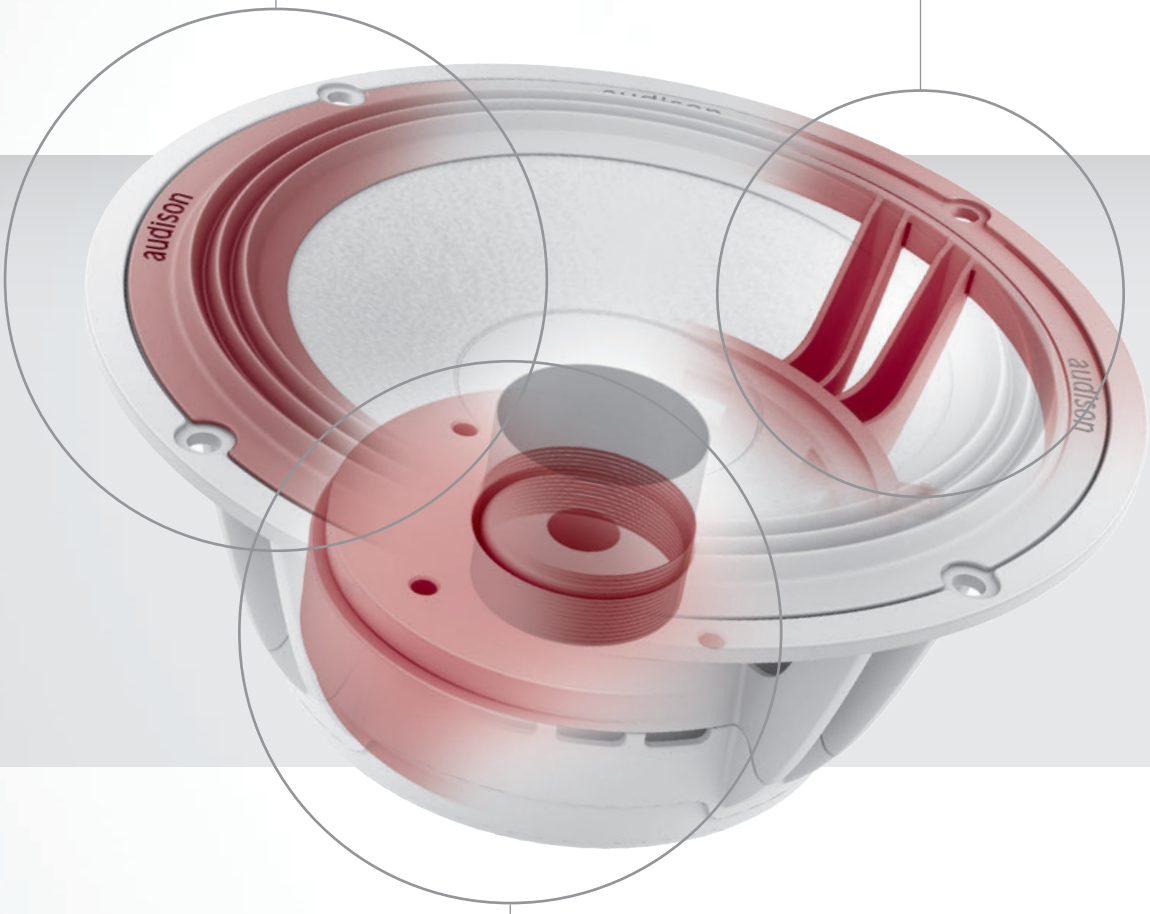
# TECHNOLOGY

The exclusive profile and selected materials provide full linearity as well as reliable performance.

**TRIPLE WAVE SURROUND**

The profile of the basket's spokes, along with the "open-air" design, ensures drastic reduction of back-wave reflections.

**AERODYNAMIC BASKET**



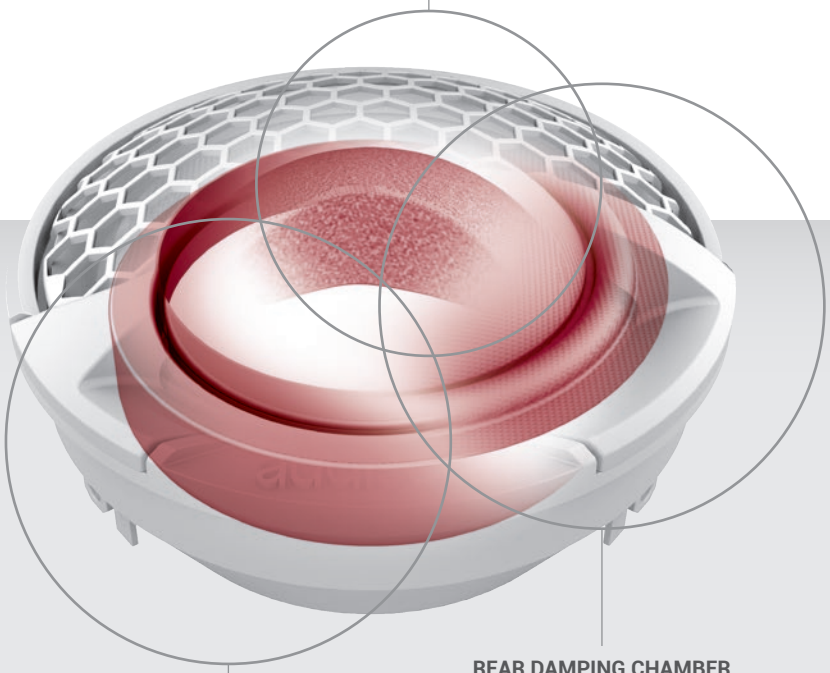

**CCAW VOICE COIL**

Extremely lightweight and compact, the Copper Clad Aluminium Wire voice coil provides very high efficiency and optimal thermal dissipation.

# voce

A combination of silk and cotton with proprietary damping treatment, provides low mass and resonance-free response up to ultrasonic frequencies.

**TETOLON DOME**



**REAR DAMPING CHAMBER**

The annular geometry of the rear damping chamber, together with the proprietary damping material, extends the frequency response to lower limits and reduces harmonic distortion.

**CCAW VOICE COIL**

The Copper Clad Aluminium Wire voice coil wound on double layer is extremely lightweight and compact, resulting a very high efficiency and crisp, dynamic sound.

**AV X6.5**

Orientable High Frequency Tuning: controlled dispersion for the best performance in the listening point.

**AV 6.5**

Cotton-fibre pressed paper cone with Light Damping treatment; a new material developed to provide a natural and linear sound performance.

# SPEAKERS

AV 1.1

AV 3.0

AV X5

AV X6.5

AV 6.5

AV 10

AV 12

Three different types of mounting for woofer and coax grille.

# voce

The Audison Voce line offers a complete and versatile range of components.
The **AV 1.1** tweeter features a very light Tetolon membrane, 28 mm Copper Clad Aluminium Wire voice coil, Neodymium REN magnet and annular rear damping chamber.
The **AV 5.0**, **AV 6.5** woofers and the **AV 10**, **AV 12** subwoofers feature an aluminium basket with a great aerodynamic structure, a cotton-fibre pressed paper cone with Light Damping treatment, a triple wave surround in butyl rubber and extremely lightweight Copper Clad Aluminium Wire voice coils.

The core of the **AV 3.0** midrange is a powerful Neodymium REN magnetic group: efficiency and linearity make it an irreplaceable component to achieve a fine yet dynamic mid range, while its compact size allows versatile and high performance installations.
The **AV X5** and **AV X6.5** coax speakers are the evolution of the woofers from the same line, thanks to the introduction of an excellent 25 mm Tetolon dome tweeter, along with a refined dedicated crossover.
The **Orientable High Frequency Tuning technology** also provides the ability to optimize dispersion in high range to achieve the best performance in the listening point.

| TECHNICAL SPECIFICATIONS | | AV 1.1 | AV 3.0 | AV X5 | AV X6.5 | AV 6.5 | AV 10 | AV 12 |
|---|---|---|---|---|---|---|---|---|
| Size | mm | 28 | 70 | 130 / 25 (wf/tw) | 165 / 25 (wf/tw) | 165 | 250 | 300 |
| | inch | 1.1 | 3 | 5 / 1 (wf/tw) | 6.5 / 1 (wf/tw) | 6.5 | 10 | 12 |
| Power handling | peak W | 180 Hi-pass filtered 2.0 kHz @ 12 dB/Oct | 100 Hi-pass filtered 250 Hz @ 12 dB/Oct | 150 | 200 | 200 | 800 | 1000 |
| | continuous W | | | 75 | 100 | 100 | 400 | 500 |
| Impedance | Ω | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Freq. response | Hz | 1.2k ÷ 22k | 200 ÷ 14k | 60 ÷ 22k | 50 ÷ 22k | 50 ÷ 7k | 30 ÷ 1k | 25 ÷ 1k |
| Sensitivity | dB/Spl | 92 | 93 | 90 | 91 | 91 | 91 | 91 |
| Magnet | | Neodimium REN | Neodimium REN | High density flux ferrite | High density flux ferrite | High density flux ferrite | High density flux ferrite | High density flux ferrite |
| Dome/cone | | Tetolon Fiber | Cotton Fiber pressed paper with Light Damping treatment | Cotton Fiber pressed paper with Light Damping treatment | Cotton Fiber pressed paper with Light Damping treatment | Cotton Fiber pressed paper with Light Damping treatment | Cotton Fiber pressed paper with Light Damping treatment | Cotton Fiber pressed paper with Light Damping treatment |
| Grille | | Included | Included | Optional | Optional | Optional | Optional | Optional |
| X-mech | mm | - | - | - | - | - | 23 | 23 |
| | inch | - | - | - | - | - | 0.9 | 0.9 |

# SPEAKERS

AV K5

AV K6

| TECHNICAL SPECIFICATIONS | | AV K5 | | | AV K6 | | |
|---|---|---|---|---|---|---|---|
| | | Tweeter | Crossover | Woofer | Tweeter | Crossover | Woofer |
| Size | mm | 28 | 88,3 x 123 x 36 | 130 | 28 | 88,3 x 123 x 36 | 165 |
| | inch | 1.1 | 3.47 x 4.84 x 1.41 | 5 | 1.1 | 3.47 x 4.84 x 1.41 | 6.5 |
| Power handling | peak | 200 | | | 250 | | |
| | continuous | 100 | | | 125 | | |
| Impedance | Ω | 4 | | | 4 | | |
| Freq. response | Hz | 60 ÷ 22k | | | 50 ÷ 22k | | |
| Sensitivity | dB/Spl | 90 | | | 91 | | |
| Grille | | Included | | | Included | | |

# voce

The **AV CX 2W MB** crossover is especially thought for the AV K5 and AV K6 two-way complete systems, shaping their acoustic response to achieve a consistent, harmonious sound in any vehicle, also offering the acoustic controls necessary to achieve the best balance according to one's own taste.

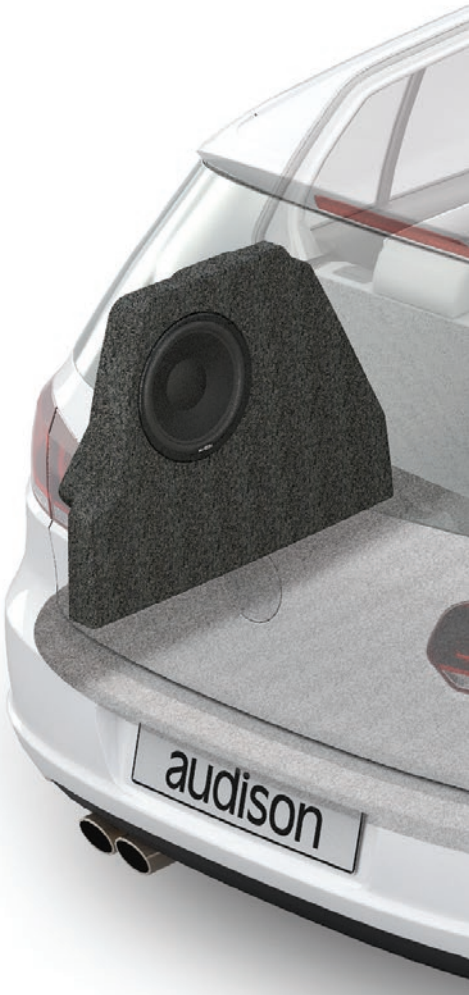
The **AV CX 2W MH** crossover is dedicated to the mid-high speakers of a three-way multi-amplified system, providing the ability to use multiple woofer sections, for maximum flexibility and absolute performance.

| TECHNICAL SPECIFICATIONS | | AV CX 2W MB | AV CX 2W MH |
|---|---|---|---|
| | | Crossover | Crossover |
| Specific Components | | AV 6.5 / AV 5.0 + AV 1.1 | AV 3.0 + AV 1.1 |
| Size | mm | 88,3 x 123 x 36 | 88,3 x 123 x 36 |
| | inch | 3.47 x 4.84 x 1.41 | 3.47 x 4.84 x 1.41 |
| Power handling | peak | 250 | 300 |
| | continuous | 125 | 150 |
| Crossover | type | LO/HI-Pass | LO/HI-Pass |
| | cut off | 2.5kHz 12/12 dB/Oct | 4.0kHz 12/18 dB/Oct |
| Component Adjustment | | Tw, -2, 0, +2 dB | Tw, -2, 0, +2 dB |

AV CX 2W MB

AV CX 2W MH

# AUDISON PRIMA SOUND PACKS




With the "**Prima Sound Packs**", Audison offers a **complete solution for your car**: the R&D team analyzed in detail the problems of **OEM Integration** and through intensive research and listening tests was able to reach a level of performance once only reserved for complex and intrusive systems.

This was possible with new solutions **like the built-in processor in the amplifiers, the concentric tweeter in the coaxial speakers and a significant reduction in the size of all the components**, preserving the most precious requirement of OEM Integration: **space**.

direct cockpit current

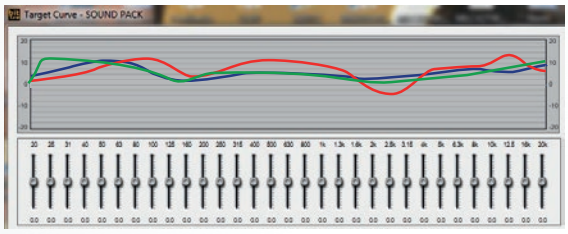
# prima

audison

# TECHNOLOGY

## DRIVE PRESET

The 7 DSP presets ensure the listening pleasure for a wide range of music enthusiasts, thanks to the combination **of equalization, fine time-alignment and level adjustments** programmed by the Audison R&D team through extensive in-car measurements and listening sessions.




| PRESET n° | LISTENING POSITION | YOUR SOUND |
|---|---|---|
| 1 | Overall | Rhythm |
| 2 | Overall | Acoustic |
| 3 | Overall | Live |
| 4 | Left seat | Acoustic |
| 5 | Right seat | Acoustic |
| 6 | Left seat | Rhythm |
| 7 | Right seat | Rhythm |

## BIT DRIVE PORTAL

Audison R&D is always driven by **Istinto Innovativo**: to fully take advantage **of the AP bit features of storing setup files**, they create a dedicate section on the **Audison bit Drive Portal** where a collection of alternative set-up files are available for download, **increasing the end users level of customization achieving "Your Sound"**.

www.audisonbitdrive.eu

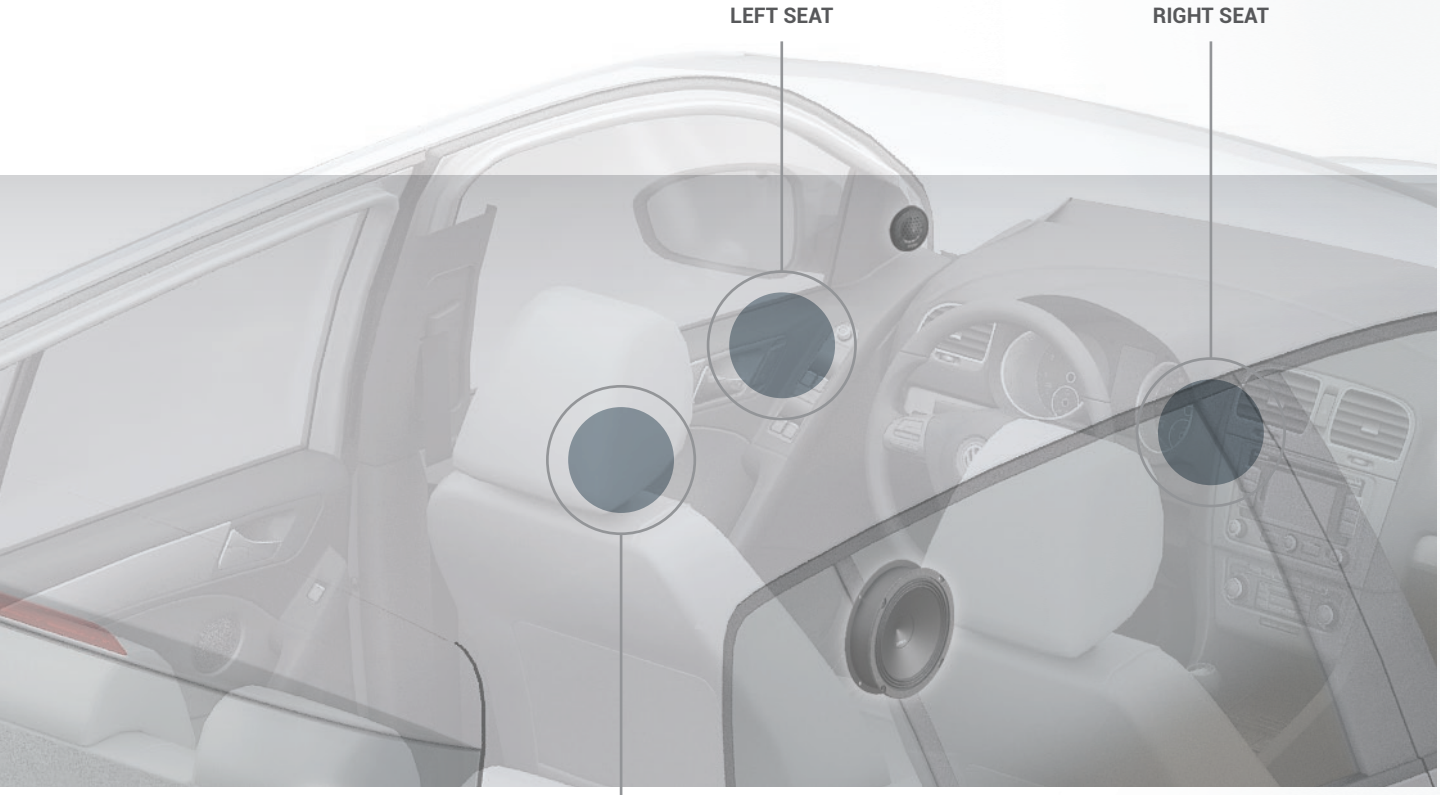
dcc direct cockpit current

## DCC - DIRECT COCKPIT CURRENT

To respond to the need of connecting the amplifier **direct in the cockpit without connect the battery**, the Audison R&D team equipped the Prima amplifiers with an innovative management circuit which **constantly monitors in real-time the power supply current consumption**. If a high amount of current is requested for a long duration, which may heat up the cables, the circuit immediately limits only the power peaks, letting the amplifier continue to play. This solution provides higher **safety and reliability in OEM upgrade applications**.

# prima

Thanks to the use of the Audison **bit Drive technology**, the Prima Sound Packs are **"Plug-and-Sound"**, providing **7 specifics DSP "Drive presets"** to satisfy the demand of several car audio enthusiasts matching their music tastes for different listening positions (Left seat, Right Seat, Overall).



**FULL DA INTEGRATED**
Thanks to **AP8.9 bit optical digital input** (24 bit/48 kHz) selectable via the DRC, Sound Pack are fully **expandable** with the **Audison Full DA** technology, providing pure digital signal transfer with **bit Play HD** and **bit DMI**.

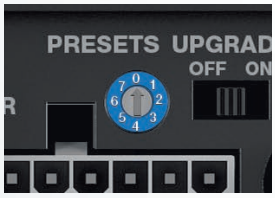
# TECHNOLOGY

### INPUT / OUTPUT

All the bit models feature six analog input channels, four for the Front/Rear and two more selectable channels, all equipped with sensitivity adjustment manageable via software. The two auxiliary channels provide the ability to connect two more channels into the front channel mix, or used to create a stereo analog AUX input, selectable via the DRC.
The bit amplifiers also feature an optical digital input (96 kHz/24 bit) selectable via the DRC, making them fully compatible with the Audison Full DA technology.

### DSP

The 9 channel built-in processor of the AP bit provides the ability to set new performance standards for OEM Integration, ensuring full compatibility with the bit Drive technology. Through the management software, the powerful 32 bit DSP ensures all the functionalities which made the Audison bit One and bit Ten renowned worldwide.




### DRIVE PRESET

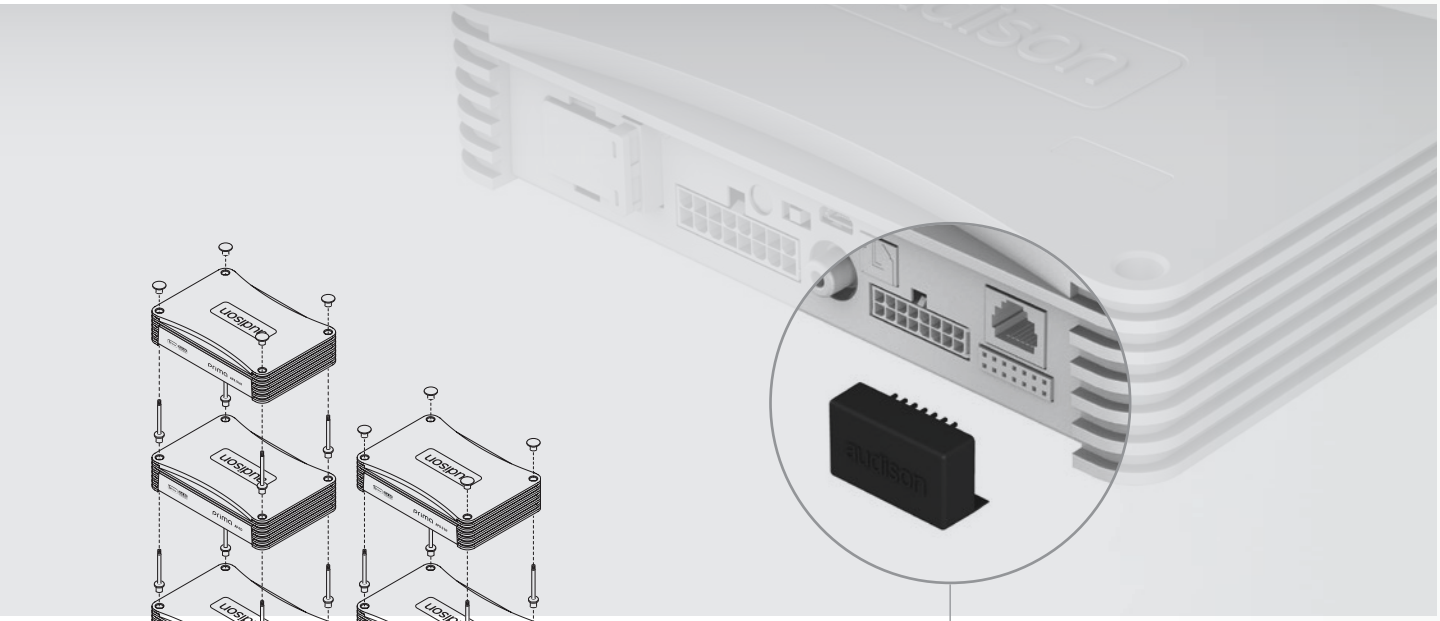
7 Drive preset for 7 different system configuration selectable by a switch in the front panel without pc software.

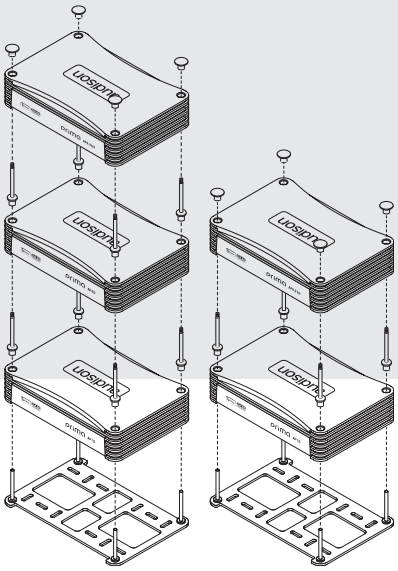
### SOFTWARE

The built-in DSP functions are similar to those found on bit Ten and bit One, but there is something new and important on the equalizer output. Unlike a 31-band graphic equalizer, the AP bit equalizer features 10 parametric “poles” to draw the target curve via the PC software. This solution preserves a noticeable amount of resources for the DSP, with the plus of providing better acoustic response, thanks to the drastic reduction of phase variations found in graphic equalizers.

# prima

The Audison Prima amplifiers are characterized by **extremely compact dimensions** and elegant look.
For the first time, Audison has made an amplifier equipped with a **9 channel a built-in processor**. This feature opens a new era: the incredible power of our DSP is now put at the service of **OEM integration**.
The R&D team succeeded in the difficult task of condensing **520 W of traditional Audison power and quality into the palm of your hand**. The reduction in dimension was achieved with the use of a special power supply, never employed in Car Audio, along with the most advanced electronic components available in the market.





**AUDISON PRIMA TOWER KIT**
With the APTK 3 (Audison Prima Tower Kit 3) staking system it's possible to stack up to 3 AP amps to save space without any problem of overheating (screws are supplied).

**AUTOMATIC SPEAKER PRESENCE**

In order to solve the problem associated with OEM amplifiers that feature signal interruption, shutting down when a proper speaker "load" is not present as often found in aftermarket integration, the Prima amplifiers feature ASP (Automatic Speaker Presence). Available as an optional plug-in accessory, this circuit provides the ability to simulate the OEM speakers' presence during the short time frame the head unit performs the check after being turned on.

# AMPLIFIERS

**AP8.9 bit**
AP8.9 bit eight channel amplifier featuring nine channel built-in DSP was designed by the Audison R&D Department to achieve maximum sound quality in OEM Integration applications. The non-amplifiable ninth channel can be used to drive a subwoofer via the mono AP1 D amplifier.

**AP5.9 bit**
AP5.9 bit five channel amplifier featuring nine channel built-in DSP is ideal to upgrade OEM system with the fifth amplified mono channel for the sub. It's possible to link an AP4 D amplifier to have four more amplified channels exceeding 1000 W power in a small space thanks to the Audison Prima Tower Kit.

**AP8.9 bit**

**AP5.9 bit**

**AP4.9 bit**

**AP4 D**

**AP1 D**

# prima

### AP4.9 bit
AP4.9 bit four channel amplifier featuring nine channel built-in DSP was designed for OEM Integration applications where a lot of power is required. It's possible to link an AP1 D mono amplifier to drive a subwoofer and an AP4 D to have four additional amplified channels exceeding 1500 W power in a small space thanks to the Audison Prima Tower Kit.

### AP4 D
The AP4 D amplifier has four amplified channels and can be linked to AP4.9 bit and AP5.9 bit amplifiers.

### AP1 D
The AP1 D mono amplifier was designed to drive a subwoofer with 540 W stable at 2 Ω. It can be connected to all the AP bit amplifiers.

| TECHNICAL SPECIFICATIONS | | | AP8.9 bit | AP5.9 bit | AP4.9 bit | AP4 D | AP1 D |
|---|---|---|---|---|---|---|---|
| Channel mode | | | 8 - 4 | 5 | 4 - 2 | 4 - 2 | 1 |
| Output Power (RMS) @ 12.0 ÷ 14.4 VDC | @ 4 Ω | W x Ch | 35 x 8 | 20 x 2 + 50 x 2 + 150 x 1 | 70 x 4 | 70 x 4 | 310 x 1 |
| | | W x Ch (bridge) | 130 x 4 | - | 260 x 2 | 260 x 2 | - |
| | @ 2 Ω | W x Ch | 65 x 8 | 40 x 2 + 90 x 2 + 270 x 1 | 130 x 4 | 130 x 4 | 540 x 1 |
| DSP | Crossover | Full/Hi Pass/Low pass/Full/ Hi Pass/Low Pass/Band Pass | √ | √ | √ | - | - |
| | Crossover type and slope | Linkwitz @ 12/24 dB Butterworth @ 6/12/18/24 dB | √ | √ | √ | - | - |
| | Crossover frequency | 68 steps @ 20 ÷ 20k Hz | √ | √ | √ | - | - |
| | Phase inversion | 0°/ 180° | √ | √ | √ | - | - |
| | Analog Input Equalizer | Automatic De-Equalization | √ | √ | √ | - | - |
| | Output Equalizer | N.9 Parametric Equalizers: ±12 dB;10 pole; 20 ÷ 20k Hz | √ | √ | √ | - | - |
| | Time Alignment Distance | 0 ÷ 510 cm / 0 ÷ 200.8 in. | √ | √ | √ | - | - |
| | Time Alignment Delay | 0 ÷ 15 ms | √ | √ | √ | - | - |
| | Time Alignment Step | 0,08 ms; 2,8 cm / 1.1 in. | √ | √ | √ | - | - |
| | Time Alignment Fine set | 0,02 ms; 0,7 cm / 0.27 in. | √ | √ | √ | - | - |
| | Drive Preset | Rotary switch for 7 installation Presets | √ | √ | √ | - | - |
| | Acoustic Preset | 2 DSP Memories, DRC selectable | √ | √ | √ | - | - |
| THD | 1 kHz/100 Hz @ 4 Ω | % | 0.05 | 0.08 (Ch 1-4) / 0.1 (Ch 5) | 0.08 | 0.08 | 0.02 / 0.03 |
| S/N Ratio | A weighted @ 2 V (AP bit amps) / 1.5 V (AP D amps) | dBA | 95 | 95 | 95 | 95 | 100 |
| Damping factor | @ 1 kHz, 2 VRMS, 4 Ω | | >70 | >70 | >70 | >70 | 150 |
| DRC controls | | | √ | √ | √ | - | - |
| Size | W x D x H | mm | 191 x 34 x 131 | 191 x 34 x 131 | 191 x 34 x 131 | 191 x 34 x 131 | 191 x 34 x 131 |
| | | inch | 7.51 x 1.33 x 4.76 | 7.51 x 1.33 x 4.76 | 7.51 x 1.33 x 4.76 | 7.51 x 1.33 x 4.76 | 7.51 x 1.33 x 4.76 |

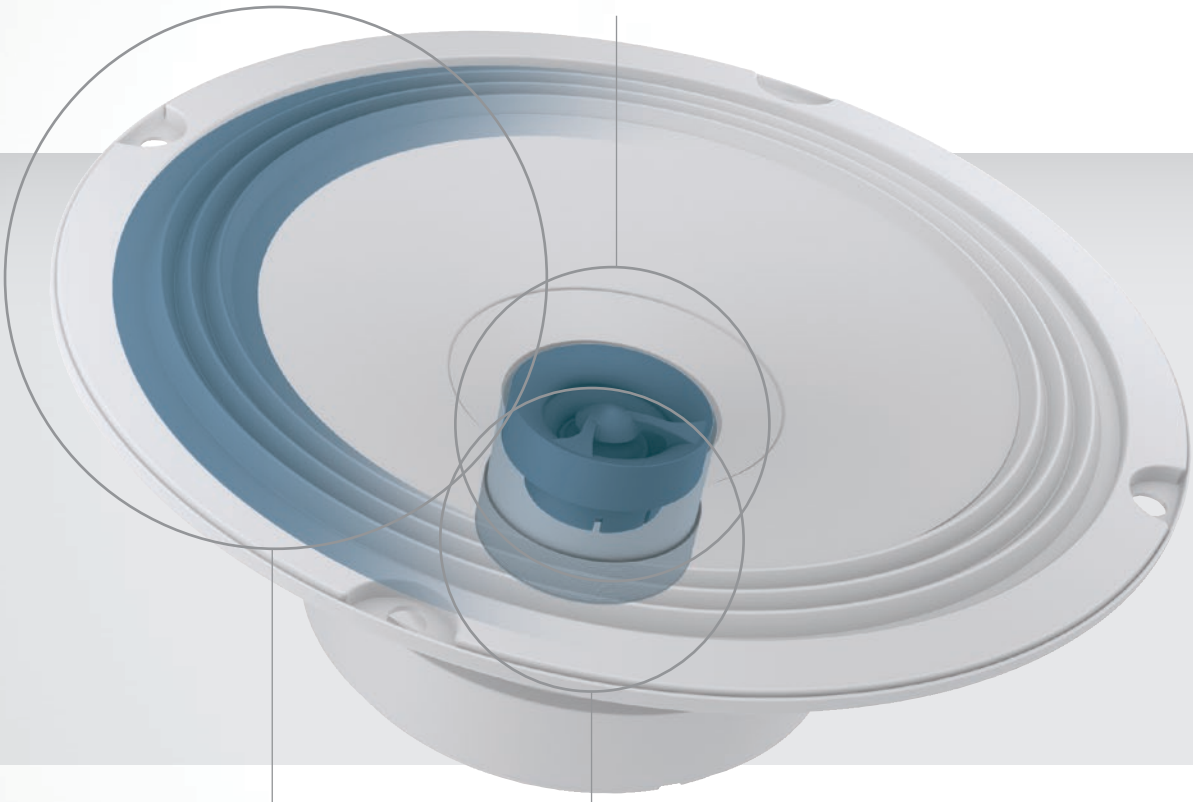
| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Amplifier Power Standard CEA CEA-2006 Compliant | RMS Output Power | 4Ω, 1%THD, 14.4 VDC | W x Ch | 35 x 8 | 20 x 2 + 50 x 2 + 150 x 1 | 70 x 4 | 70 x 4 | 310 x 1 |
| | S/N Ratio | Ref. 1 W Output | dBA | 85 | 80 | 80 | 80 | 79 |

audison

# TECHNOLOGY

Concentric tweeter within the woofer with one single point of sound emission for consistent in-phase response, with consequent reconstruction of the acoustic scene through a system of separate woofer + tweeter system.
Tweeter featuring acoustic lens specifically designed to ensure an extremely linear frequency response also off-axis, typical of in-door installs.

**CONCENTRIC COAXIAL TWEETER**

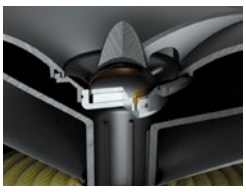


**32 mm COPPER VOICE COIL**

32 mm pure copper voice coil, for high power handling and outstanding low frequency control.

**TRIPLE WAVE SURROUND**

The exclusive profile and selected materials provide full linearity as well as reliable performance.

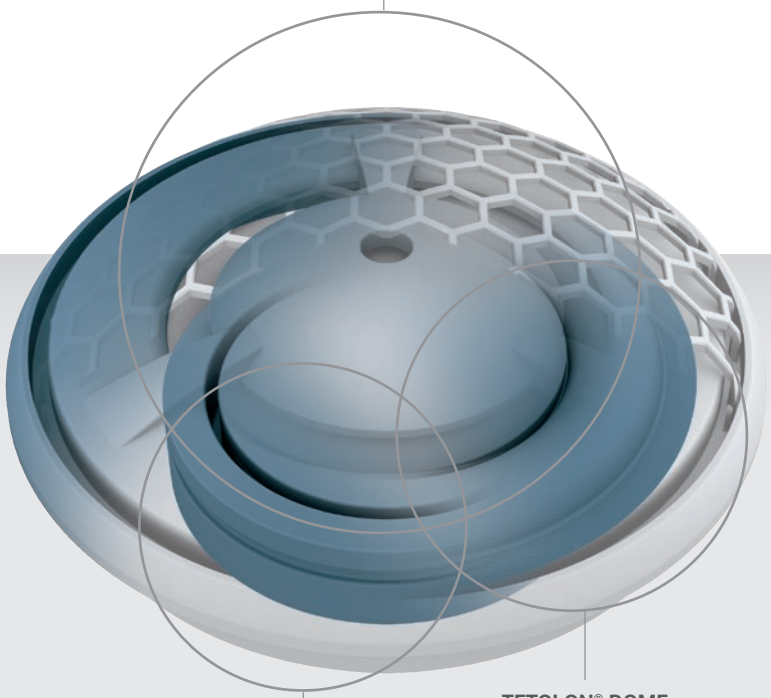


**HORN LOADED TWEETER**
40 mm horn loaded dome tweeter contributing to maximize efficiency to increase it up to 96 dB SPL with acoustic lens specifically designed and applied to the tweeter to increase dispersion in high frequency range and PEI supertweeter to strengthen emission of very high frequency ranges otherwise affected by off-axis positioning compared to the listening point.

# prima

Acoustic lens designed to compensate for the frequency response within the 10kHz - 13kHz range, to fine-tune the product emission in critical OEM placements, where the product performance is affected by the factory grille presence.

**ACOUSTIC LENS**



**TETOLON® DOME**

26 mm diameter emission diaphragm combined with its wide roll surround for maximum efficiency and reduced resonance frequency.

**CCAW VOICE COIL**

CCAW (Copper Clad Aluminium Wire) ultra light ferrofluid-cooled voice coil, wound on Kapton former, for a better heat dissipation.

**APCX TW CROSSOVER**

Extremely small sized dedicated passive crossover, supplied with the product and optimised for OEM Integration, featuring an attenuation switch (0 dB, +2 dB) to tune the in-car response according to the different installation conditions.

audison

# SPEAKERS

**AP 1**

**AP 4**

**AP 5**

**AP 6.5**

**AP 8**

Grille included

# prima

The Audison Prima speaker line offers complete solutions for OEM Integration.

The **AP 1** tweeter features a 26 mm diameter emission diaphragm, an acoustic lens designed to compensate for the frequency response within the 10kHz - 13kHz range, a Neodymium REN magnet and extremely small sized dedicated passive crossover.

The **AP 4** midbass offers very extended frequency response, both in high and low frequencies, combined with high efficiency and features a 25 mm pure copper voice coil to ensure more balance in mid-high frequency ranges.

The **AP 5** and **AP 6.5** feature a 32 mm pure copper voice coil, for high power handling and outstanding low frequency control. All the woofers don't employ any filter, to maximize efficiency: the dome profile has been optimised with **Klippel R&D Scan Vibrometer** to obtain a calibrated mechanical low-pass cut-off frequency. The surround features the exclusive shallow "Triple Wave" profile, for maximum excursion linearity.

To ease the installation in OEM placements all the woofers are equipped with high current fast-on terminals with double contact on positive and negative poles for high flexibility and quick connection. All the Prima line speakers have been developed with the KLIPPEL suite.

| TECHNICAL SPECIFICATIONS | | AP 1 | AP 4 | AP 5 | AP 6.5 | AP 8 |
|---|---|---|---|---|---|---|
| Size | mm | 26 | 100 | 130 | 165 | 200 |
| | inch | 1 | 4 | 5 | 6,5 | 8 |
| Power handling | peak | 150<br>Hi-Pass filtered<br>@ 3,5 kHz - 12 dB Oct. | 120 | 150 | 210 | 300 |
| | continuous | - | 40 | 50 | 70 | 100 |
| Impedance | Ω | 4 | 4 | 4 | 4 | 4 |
| Freq. response | Hz | 2k ÷ 20k | 80 ÷ 7,5k | 70 ÷ 5k | 60 ÷ 5k | 35 ÷ 3k |
| Sensitivity | dB/SPL | 93 | 91 | 93 | 93,5 | 93,5 |
| Magnet | | Neodymiun REN | High density flux ferrite | High density flux ferrite | High density flux ferrite | High density flux ferrite |
| Dome/cone | | Tetolon | Water repellent pressed paper | Water repellent pressed paper | Water repellent pressed paper | Water repellent pressed paper |
| Grille | | Included | Optional | Optional | Optional | Included |

From R&D to final product KLIPPEL since 2005

# SPEAKERS

**APX 4**

**APX 5**

**APX 6.5**

**APX 570**

**APX 690**

Grille included

# prima

**APX 4**, **APX 5**, **APX 6.5** and **APX 570** feature a concentric coaxial tweeter: with one single point of sound emission it's possible to achieve a consistent in-phase response, with consequent reconstruction of the acoustic scene comparable to a system of separate woofer + tweeter.
The tweeter features an acoustic lens specifically designed to ensure an extremely linear frequency response also off-axis, typical of in-door installs.
APX 4, APX 5, APX 6.5, APX 570 feature a 32 mm pure copper voice coil, for high power handling and outstanding low frequency control and all the cones feature a TPU (Thermoplastic Polyurethane) surround with the exclusive shallow "Triple Wave" profile, for maximum excursion linearity.

**APX 690** features an exclusive 40 mm horn loaded dome tweeter, that contributes to maximize efficiency up to 96dB SPL, and an acoustics lens specifically designed and applied to the tweeter to increase dispersion in high frequency range.
To strengthen the emission of very high frequency ranges otherwise affected by off-axis positioning compared to the listening point, **APX 690** features of a PEI (Polyethylene intected) supertweeter.
To ease the installation in OEM placements, all the components have high current fast-on terminal for high flexibility and quick connection.
All the components in the Prima line was developed with KLIPPEL suite.

| TECHNICAL SPECIFICATIONS | | | APX 4 | APX 5 | APX 6.5 | APX 570 | APX 690 |
|---|---|---|---|---|---|---|---|
| Size | Woofer | mm / inch | 100 / 4 | 130 / 5 | 165 / 6.5 | - / 5x7 | - / 6x9 |
| | Tweeter | mm / inch | 24 / 0.9 | 24 / 0.9 | 24 / 0.9 | 24 / 0.9 | 40 / 1.58 |
| | Super Tweeter | mm / inch | - | - | - | - | 15 / 0.6 |
| Power handling | | peak | 120 | 150 | 210 | 210 | 300 |
| | | continuous | 40 | 50 | 70 | 70 | 100 |
| Impedance | | Ω | 4 | 4 | 4 | 4 | 4 |
| Freq. response | | Hz | 80 ÷ 23k | 70 ÷ 23k | 60 ÷ 23k | 60 ÷ 23k | 40 ÷ 23k |
| Sensitivity | | dB/SPL | 91 | 93 | 94 | 93 | 96 |
| Magnet | | | Neodymiun REN | High density flux ferrite | High density flux ferrite | High density flux ferrite | High density flux ferrite |
| Dome/cone | | | PEI/Water repellent pressed paper | PEI/Water repellent pressed paper | PEI/Water repellent pressed paper | PEI/Water repellent pressed paper | PEI/Water repellent pressed paper |
| Grille | | | Optional | Optional | Optional | Optional | Included |

From R&D to final product
KLIPPEL since 2005

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# SPEAKERS

| TECHNICAL SPECIFICATIONS | | APK 130 | | |
|---|---|---|---|---|
| | | Tweeter | Crossover | Woofer |
| Size | mm | 26 | 46,5 x 37,5 x 20,1 | 130 |
| | inch | 1 | 1.83 x 1.47 x 0.8 | 5 |
| Power handling | peak | 225 | | |
| | continuous | 75 | | |
| Impedance | Ω | 4 | | |
| Freq. response | Hz | 70 ÷ 20k | | |
| Sensitivity | dB/Spl | 93 dB | | |
| Grille | | Included | | |

APK 130

| TECHNICAL SPECIFICATIONS | | APK 165 | | |
|---|---|---|---|---|
| | | Tweeter | Crossover | Woofer |
| Size | mm | 26 | 46,5 x 37,5 x 20,1 | 165 |
| | inch | 1 | 1.83 x 1.47 x 0.8 | 6,5 |
| Power handling | peak | 300 | | |
| | continuous | 100 | | |
| Impedance | Ω | 4 | | |
| Freq. response | Hz | 60 ÷ 20k | | |
| Sensitivity | dB/Spl | 93,5 dB | | |
| Grille | | Included | | |

APK 165

From R&D to final product KLIPPEL since 2005

All the systems mount the **AP 1** tweeter with the **APCX TW** crossover featuring a two-position level selector providing the ability to adapt its response to its two main applications: +2 dB if installed behind the OEM grille, 0 dB for an A-pillar installation without additional grilles between the tweeter and the listener.
The three-way **APK 163** system deserves special attention; the Audison designers developed a separate crossover dedicated to each speaker, simplifying OEM speaker replacement operation, negating the routing of additional cables through the door, which could void the car warranty.

| TECHNICAL SPECIFICATIONS | | APK 163 | | | | | |
|---|---|---|---|---|---|---|---|
| | | Tweeter | Tweeter Crossover | Midbass | Midbass Crossover | Woofer | Woofer Crossover |
| Size | mm | 26 | 46,5 x 37,5 x 20,1 | 100 | 72 x 45,5 x 23 | 165 | 72 x 45,5 x 23 |
| | inch | 1 | 1.83 x 1.47 x 0.8 | 4 | 2.83 x 1.8 x 0.9 | 6,5 | 2.83 x 1.8 x 0.9 |
| Power handling | peak | 375 | | | | | |
| | continuous | 125 | | | | | |
| Impedance | Ω | 4 | | | | | |
| Freq. response | Hz | 50 ÷ 20k | | | | | |
| Sensitivity | dB/Spl | 93,5 dB | | | | | |
| Grille | | Included | | | | | |

APK 163

# APSP GOLF6

## Prima Sound Pack for VW GOLF VI

| TECHNICAL SPECIFICATIONS | | Front |
|---|---|---|
| Sensitivity | | APK G6 2-way System |
| Size | mm (inch) | Woofer 165 (6.5) |
| | | Tweeter 26 (1) |
| Power handling | peak | 300 |
| | continuous | 100 |
| Impedance | Ω | 4 |
| Freq. response | Hz | 60 ÷ 20k |
| Crossover type | | APCX TW G6 |

### FRONT SYSTEM: APK G6

APK G6 is a 2 way system featuring the AP 6.5 woofer, AP 1 tweeter and a specific tweeter crossover. The system is packaged with **composite OEM speaker baffles, harnesses and seals** to retrofit the woofer and tweeter into speaker factory locations to an OEM standard.

| TECHNICAL SPECIFICATIONS | | Rear |
|---|---|---|
| Sensitivity | | APX 6.5 2-way Coax |
| Size | mm (inch) | Woofer 165 (6.5) |
| | | Concentric Tweeter 24 (0.9) |
| Power handling | peak | 210 |
| | continuous | 70 |
| Impedance | Ω | 4 |
| Freq. response | Hz | 60 ÷ 23k |
| Crossover type | | Integrated |

### REAR SYSTEM:

The APX 6.5 are provided with **composite OEM speaker baffles, harnesses and seals** to retrofit the speaker into factory locations to an OEM standard.

# prima

A "Sound Pack" developed specifically for the VW Golf VI: the system's pulsing heart is the Audison AP8.9 bit amplifier featuring **bit Drive technology**, combined with a **dedicated Prima speaker system and accessories** for **real OEM integration**!

| AP 8.9 bit OUTPUT CHANNEL MAP | | | |
|---|---|---|---|
| CHANNEL | MODE | SPEAKER | POWER |
| 1-2 | Stereo | APK G6 - Front | 2 x 35W RMS @ 4Ω |
| 3-4 | Stereo | APx 6.5 - Rear | 2 x 35W RMS @ 4Ω |
| 5-6 + 7-8 | Bridge + Bridge | APS G6 - Subwoofer | 2 x 130W RMS @ 4 Ω (bridge) |

AP8.9 bit

### AMPLIFIER: AP8.9 bit

The Audison AP8.9 bit is the foundation on which the Sound Pack is built upon. The 8 channels in this flexible "all-in-one" amplifier have been **configured to power the complete speaker system including the APS G6 dual voice coil subwoofer system**.

| TECHNICAL SPECIFICATIONS | | |
|---|---|---|
| Size | mm | 250 |
| | inch | 10 |
| Power handling | peak | 900 |
| | continuous | 300 |
| Impedance | Ω | 4 + 4 |
| Freq. response | Hz | 28 ÷ 300 |

### SUBWOOFER: APS G6

The Plug & Sound sealed passive subwoofer system integrates perfectly into the car's interior. The subwoofer itself has been **engineered to mate perfectly with the available enclosure volume**, exploiting all the power the AP8.9 bit delivers thanks to is dual voice coil configuration.

***Accessories:*** *Heavyduty metal grill featuring Aluminum Audison Logo, Wiring kit, Fixing kit*

### DCC -WIRING KIT

Using **DCC Technology**, the Prima Sound Pack APSP GOLF6 is packaged with a specific harness which derives the power supply for the AP8.9 bit from directly behind the OEM headunit. The AP8.9 bit input/output connections to the OEM headunit and OEM speaker wiring are simplified with a **single customized wiring kit**, easy to route in the vehicle interior.

# STYLE, PERFORMANCE AND VERSATILITY

The new SR range was created for both the enthusiasts who want to enter into the world of Car Audio and for expert users who are looking for a non-invasive, yet high-performance system. Both will enjoy amplifiers of excellence, that will satisfy their desire for power and musical quality following the renowned Audison philosophy.
In terms of state-of-the-art electronics, mono-block construction technique and versatility of use, the SR project is the best choice balancing size, power, look and sound quality.

The SR amplifiers boast the quality and care for details proper of the project, being entirely engineered in Italy and manufactured in compliance with the Audison high quality standards.

# SR

audison

# TECHNOLOGY

### ALUMINIUM HEATSINK AND STATUS INDICATOR

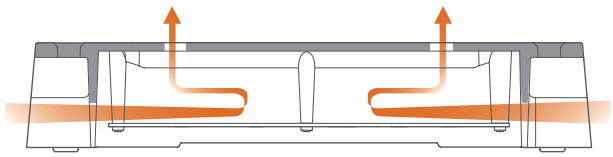
The heatsink is an aluminium mono-block; for the best heat dissipation and light weight. The SR logo above the heatsink illuminates blue under normal operating conditions and turns red when the protection circuitry is engaged, easily identifying the amplifier status.

### VCRA - REMOTE SUB VOLUME CONTROL

The importance of knowing no limits. When you drive the subwoofer in mono, in SR 5 and SR 1Dk models, you can use VCRA Analog Remote Volume Control by connecting the ESV (External Subwoofer Volume) to the special Sub Vol socket.

### TOP PANEL CONTROLS

The controls for operating modes, input sensitivity and crossovers are found along the top panel of the amplifier for an easier access and protected from a semitransparent cover.



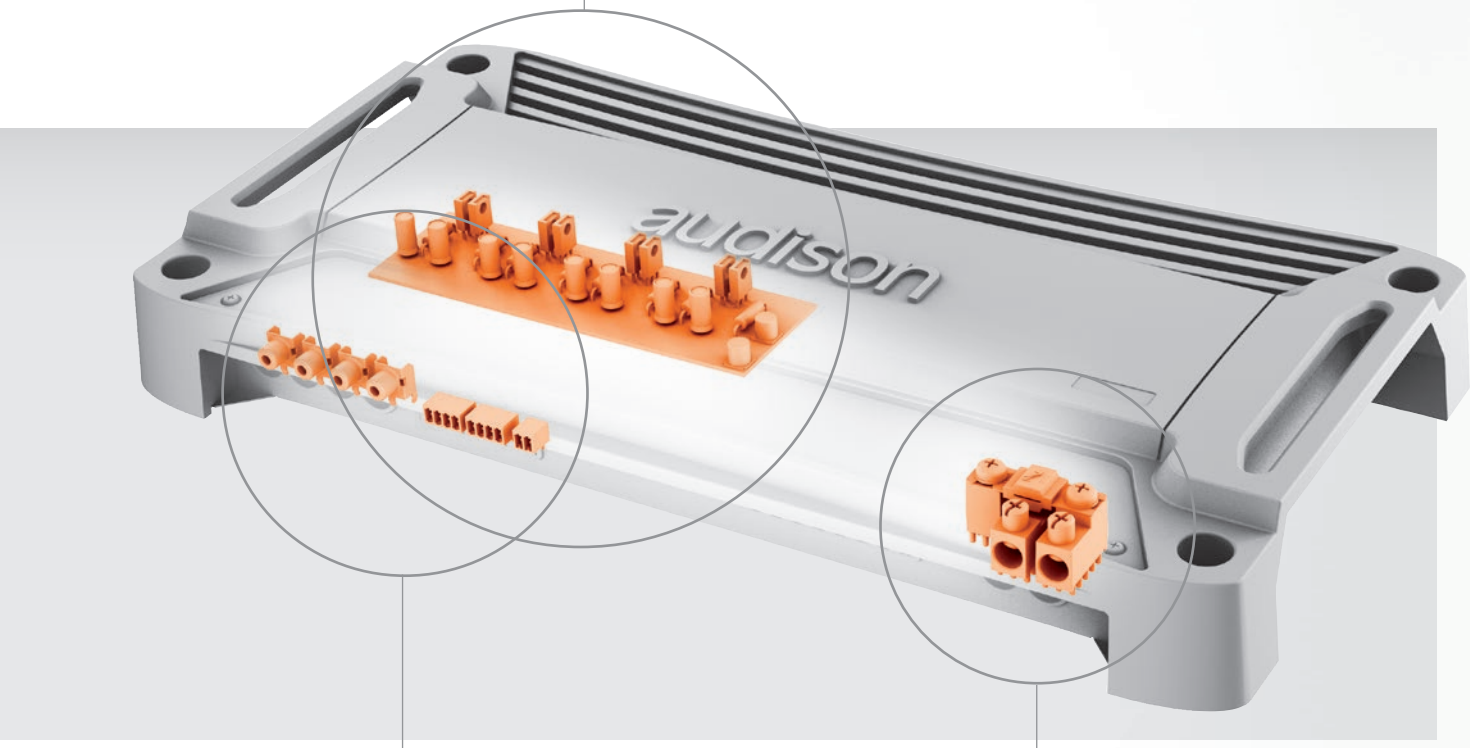
### CONVECTION COOLING SYSTEM

Intakes fresh air and circulates this cool air through the amplifier, exhaling the hot air through the vents on the top of the amplifier. This natural air circulation generates an efficient cooling system, no matter the amplifier's mounting position.

# SR

DYNAB circuitry merges the simplicity of the traditional B Class amplifier with the qualitative benefits of an AB Class amplifier. Essential in the SR full range project is the latest generation high  speed TO247 transistors, for smooth and dynamic sound.

**DYNAB CIRCUITRY**




**LOW AND HI-LEVEL INPUTS**

The hi-level speaker input signal,on mono amps, can also be outputted through the PRE OUT RCA terminals, to expand any system easily. Both the low and hi-level signal inputs feature the LNS™ noise suppression.

**HIGH EFFICIENCY POWER CONNECTION**

The power supply connection system features an innovative high-current solution. The power terminals, made from one single metal block, soldered with the Multipoint Power Soldering system and featuring the strip fuse directly fastened to the terminals, provide the ability to reduce power losses avoiding formation of high temperatures.

# AMPLIFIERS

SR 2

SR 4

SR 5

SR 1Dk

SR 1D

# SR

**SR 2** is a DYNAB stereo amplifier perfect to drive front speakers. Thanks to the built-in by-passable crossover, it is also suitable for many applications such as with mono subwoofers or Mid-Hi front in multi-channel speaker systems.

**SR 4** is a DYNAB four-channel amplifier, perfect for driving Front/Rear, Front/Sub or as part of a multi-channel system, with independent, fully configurable, by-passable crossover sections.

**SR 5** is a DYNAB five-channel single amplifier system solution where high power and versatility are required. The extended range of the crossover section allows its use in endless system designs.

**SR 1D** is a compact mono Digital amplifier. With a full configurable by-passable crossover and PRE OUT coming from the hi-level speakers inputs, it is perfect to drive a subwoofer in an OEM factory upgraded system.

**SR 1Dk** is a powerful mono Digital amplifier representing maximum expandability in terms of power and configuration capability. Featuring a PRE OUT recreated from the hi-level speakers inputs and a by-passable full configurable crossover along with its ability to operate in "cascade" mode linking many amplifiers together, its extreme versatility makes it a premium product.

| TECHNICAL SPECIFICATIONS | | | SR 2 | SR 4 | SR 5 | SR 1D | SR 1Dk |
|---|---|---|---|---|---|---|---|
| Channel mode | | | 2 - 1 | 4 - 3 - 2 | 5 - 3 | 1 | 1 |
| Output Power (RMS) @ 12.0 ÷ 14.4 VDC | @ 4 Ω | W x Ch | 60 x 2 | 65 x 4 | 55 x 4 + 185 x 1 | 280 x 1 | 600 x 1 |
| | Bridge @ 4 Ω | W x Ch | 180 x 1 | 60 x 2 + 190 x 1 | 150 x 2 + 160 x 1 | - | - |
| | | | - | 175 x 2 | - | - | - |
| | @ 2 Ω | W x Ch | 90 x 2 | 90 x 4 | 70 x 4 + 260 x 1 | 460 x 1 | 940 x 1 |
| | @ 1 Ω | W x Ch (bridge) | - | - | - | 640 x 1 | 1200 x 1 |
| | @ 4/2 Ω | W x Ch | - | 90 x 2 (2) + 180 x 1 (4) | 140 x 2 (4) + 260 x 1 (2) | - | 1800 x 1 |
| Amp Chain | @ 2 Ω | W x 2 Amp | - | - | - | - | 2400 |
| Filters | Bypass | Hz @ dB/Oct. | OK | OK | OK | OK | OK |
| | Hi-Pass | Hz @ dB/Oct. | 50 ÷ 5k @ 12 | A / B: 50 ÷ 5k @ 12 | F: 50 ÷ 5k ; R: 50 ÷ 220 @ 12 | - | - |
| | Lo-Pass | Hz @ dB/Oct. | - | B: 50 ÷ 5k @ 12/24(L+R) | S: 50 ÷ 220 @ 24 | 50 ÷ 500 @ 24 | ON / OFF 50 ÷ 220 @ 24 |
| | Band-Pass | Hz @ dB/Oct. | - | - | R: 50 ÷ 5k @ 12 | - | - |
| | Subsonic | Hz @ dB/Oct. | - | - | - | 25 @ 24 | OFF ÷ 40 @ 24 |
| THD | 1 kHz/100Hz@ 4 Ω | % | 0.07 / - | 0.08 / - | 0.08 / 0.03 | - / 0.3 | - / 0.3 |
| S/N Ratio | A weighted @ 1 V | dBA | 100 | 104 | 98 | 90 | 85 |
| Damping factor | 1 kHz/100Hz@ 4 Ω | | 200 / - | 110 / - | 100 / 500 | - / 150 | - / 150 |
| VCRA - Remote Sub Volume Control (Optional) | | | No | No | OK | No | OK |
| Size | W x D x H | mm | 213 x 288 x 53,5 | 213 x 408 x 53,5 | 213 x 500 x 53,5 | 213 x 288 x 53,5 | 213 x 408 x 53,5 |
| | | inch | 8.38 x 11.33 x 2.10 | 8.38 x 16.06 x 2.10 | 8.38 x 19.68 x 2.10 | 8.38 x 11.33 x 2.10 | 8.38 x 16.06 x 2.10 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Amplifier Power Standard CEA CEA-2006 Compliant | RMS Output Power | @ 4 Ω, ≤1% TH-D+N, 14.4 VDC | W x Ch | 60 x 2 | 60 x 4 | 53 x 4 + 175 x 1 | 250 x 1 | 520 x 1 |
| | S/N Ratio | Ref. 1 W Output | dBA | 83 | 83 | 53 W Ch:83<br>175 W Ch:80 | 74 | 56 |

elettromedia

Elettromedia, an Italian company, is a leader within the world-wide car Hi-Fi market.
Born in 1987 in Potenza Picena by a group of friends who shared the same passion for in-car high fidelity, throughout the past years Elettromedia has been walking the path of excellence: its products are distributed in more than 50 countries; the company has received many awards and acknowledgements from the most authoritative leaders within the car audio industry; it also can boast reviews of more than 3000 pages published in 30 different languages (visit: www.elettromedia.it/press_area.asp).
The Elettromedia brands are Audison, Hertz, Connection and AZaudiocomp. Through a co-branding strategy, the company offers all of the components required for a complete, top-level car audio system.

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